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TESTS: Honda CB1100F, Can-Am Sonic MX, Husqvarna 250CR, Kawasaki KZ750, Suzuki GS450E

CYCLE GUIDE

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OFF-ROAD

MAKE & MODEL	ISSUE	TYPE	ENGINE TYPE	WHEEL TRAVEL, IN. FRONT/REAR	WEIGHT, LBS	RAKE/TRAIL, DEGREES/INCHES	GEARS
Can-Am Sonic MX-'83	January '83	Motocross	Four-stroke	11.6/12.1	272	28.0/4.2	5
Honda CR250R-'82	May '82	Motocross	Two-stroke	11.4/12.0	228	27.5/4.3	5
Honda CR480R-'82	April '82	Motocross	Two-stroke	11.5/12.0	232	27.2/4.2	4
Honda XR500R-'82	November '81	Enduro	Four-stroke	9.5/10.0	289	28.0/4.4	5
Husqvarna 250CR-'83	January '83	Motocross	Two-stroke	11.8/12.7	227	30.0/5.5	6
Husqvarna 250WR-'82	June '82	Enduro	Two-stroke	10.6/10.7	236	30.0/6.0	6
Husqvarna 430CR-'82	July '82	Motocross	Two-stroke	11.8/12.0	232	30.5/6.0	6
Husqvarna 500CR-'82	October '82	Motocross	Two-stroke	11.8/12.0	239	30.5/6.0	4
Kawasaki KDX175-'82	September '82	Enduro	Two-stroke	9.6/10.5	227	28.0/4.7	6
Kawasaki KX125-'82	November '82	Motocross	Two-stroke	11.2/11.4	200	28.0/4.8	6
Kawasaki KX250-'82	May '82	Motocross	Two-stroke	11.2/11.3	220	30.0/5.1	5
KTM 495 MC-'82	July '82	Motocross	Two-stroke	11.3/12.1	247	27.5/4.8	5
Maico Alpha 1 490-'82	July '82	Motocross	Two-stroke	11.6/11.5	248	28.5/5.0	5
Maico 490 E-'83	December '82	Enduro	Two-stroke	11.9/12.6	261	27.5/4.6	5
Suzuki DR250-'82	December '82	Trail	Four-stroke	9.7/10.3	259	28.2/4.6	5
Suzuki PE175-'82	September '82	Enduro	Two-stroke	10.0/9.8	229	28.0/4.4	6
Suzuki RM125-'82	November '82	Motocross	Two-stroke	11.2/12.6	197	29.5/4.8	6
Suzuki RM250-'82	May '82	Motocross	Two-stroke	10.6/12.3	217	29.3/4.8	5
Suzuki RM465-'82	April '82	Motocross	Two-stroke	10.8/12.0	234	29.3/4.8	4
Yamaha IT175-'82	August '82	Enduro	Two-stroke	10.2/11.2	216	28.5/4.9	6
Yamaha YZ250-'82	May '82	Motocross	Two-stroke	11.0/11.0	235	27.5/4.7	5
Yamaha YZ490-'82	April '82	Motocross	Two-stroke	11.3/12.8	238	28.5/4.7	4

STREET

MAKE & MODEL	ISSUE	ENGINE TYPE*	DISPLACEMENT, CC	QUARTER-MILE, SEC./MPH	TOP SPEED, MPH	WEIGHT, LBS	FUEL CONSUMPTION, MPG	STOPPING DISTANCE FROM 60 MPH, FT.
BMW R65 LS-'82	April '82	2C/G	649.6	14.15/92.4	110	417	35-50	138
BMW R80 G/S-'81	November '81	2C/G	797.5	14.07/92.3	105	405	36-54	NA
BMW R100RT-'82	May '82	2C/G	979.9	13.86/95.1	122	523	35-50	148
H-D FLH Classic-'82	August '82	45-deg. 2D/F	1338.6	15.47/82.0	101	752	32-42	180
H-D FXRS-'82	December '81	45-deg. 2D/F	1338.6	13.92/93.1	109	594	40-47	124
Honda CBX400F-'82	October '82	4A/F	399.1	13.59/96.5	110	402	34-58	128
Honda CB650SC Nighthawk-'83	December '82	4A/G	656.0	12.28/108.0	122	451	28-51	128
Honda CB750F-'81	June '81	4A/F	748.7	12.40/108.3	118	526	38-53	126
Honda CB900F-'81	July '81	4A/F	901.8	12.21/111.1	141	547	41-47	130
Honda CB1100F-'83	January '83	4A/F	1062.2	11.22/119.8	144	550	33-46	135
Honda CB1100R-'81	November '81	4A/F	1062.2	NA	155	518	31-48	NA
Honda CX500 Turbo-'81	September '81	80-deg. 2E/G	496.9	NA	136	549	NA	NA
Honda FT500 Ascot-'82	August '82	1B/F	497.7	14.92/83.7	97	360	47-54	146
Honda GL500 Interstate-'81	August '81	80-deg. 2E/G	496.9	14.88/86.4	96	517	39-53	140
Honda GL1100-'81	April '82	4C/G	1085.0	12.60/106.5	139	606	41-49	NA
Honda GL1100A Aspencade-'82	April '82	4C/G	1085.0	13.23/98.8	139	724	40-50	145
Honda GL1100I Interstate-'82	April '82	4C/G	1085.0	13.30/99.5	139	697	40-50	NA
Honda Nighthawk 750-'82	March '82	4A/F	748.7	12.74/103.8	131	543	36-49	128
Honda V45 Magna-'82	June '82	4D/G	748.1	12.34/105.9	129	507	30-46	124
Honda V45 Sabre-'82	June '82	4D/G	748.1	12.37/106.8	128	511	29-47	149
Kawasaki GPz550-'82	November '82	4A/F	553.8	13.20/99.6	132	437	43-61	132
Kawasaki GPz1100-'82	May '82	4A/F	1089.9	11.33/119.4	137	534	35-48	127
Kawasaki KZ750-L3-'83	January '83	4A/F	739.0	12.09/108.9	134	487	47-53	132
Kawasaki KX750LTD-'82	December '82	4A/F	739.0	12.56/105.3	131	474	41-55	131
Kawasaki KZ1000J-'81	February '81	4A/F	998.6	11.62/116.3	130	521	30-51	135
Kawasaki KZ1000R-'82	November '82	4A/F	998.6	11.85/116.7	134	505	35-49	129
Kawasaki KZ1100A-'81	April '81	4A/G	1089.9	11.62/117.6	142	559	38-44	NA
Kawasaki KZ1100 Spectre-'82	March '82	4A/G	1089.9	11.96/110.4	142	553	36-44	132
Suzuki GS450E-'83	January '83	2A/F	448.2	14.24/93.2	106	384	39-49	131
Suzuki GS550M Katana-'82	August '82	4A/F	549.7	13.69/95.9	120	449	39-53	135
Suzuki GS650GL-'82	July '82	4A/G	673.9	NA	123	472	49-61	NA
Suzuki GS750E-'82	January '82	4A/F	747.4	12.01/109.1	127	519	34-49	127
Suzuki GS1000S Katana-'81	December '81	4A/F	997.5	11.40/118.7	141	525	33-51	129
Suzuki GS1100E-'82	May '82	4A/F	1074.9	11.20/119.3	141	530	37-49	132
Suzuki GS1100G-'82	September '82	4A/G	1074.9	11.92/114.2	137	555	42-48	138
Suzuki GS1100GK-'82	October '82	4A/F	1074.9	12.58/104.5	137	647	31-44	155
Suzuki XN85 Turbo-'82	July '82	4A/F	673.9	NA	135	492	NA	NA
Yamaha XS400 Seca-'82	December '82	2A/F	399.4	14.50/89.2	110	382	47-57	140
Yamaha 550 Seca-'82	February '82	4A/F	528.7	NA	121	418	41-55	NA
Yamaha 750 Seca-'81	June '81	4A/G	748.6	12.26/108.0	128	495	44-56	134
Yamaha XJ650 Seca-'82	September '82	4A/G	653.4	12.83/103.4	125	469	44-59	135
Yamaha XJ650LJ Turbo-'82	September '82	4A/G	653.4	12.61/104.6	126	541	39-51	145
Yamaha XS400 Maxim-'82	November '82	2A/F	399.4	14.65/89.3	104	376	52-61	136
Yamaha 750 Virago-'82	January '82	75-deg. 2D/G	748.8	13.28/99.8	105	481	43-48	132
Yamaha 920 Virago-'82	February '82	75-deg. 2D/G	920.0	12.94/101.6	108	514	36-49	134
Yamaha XV920R-'82	February '82	75-deg. 2D/F	920.0	13.10/100.4	112	509	37-51	128

*A-Transverse Vertical, B-Vertical (single-cylinder only), C-Horizontally Opposed, D-Tandem Vee, E-Transverse Vee, F-Chain Final Drive, G-Shaft Final Drive, H-Belt Final Drive

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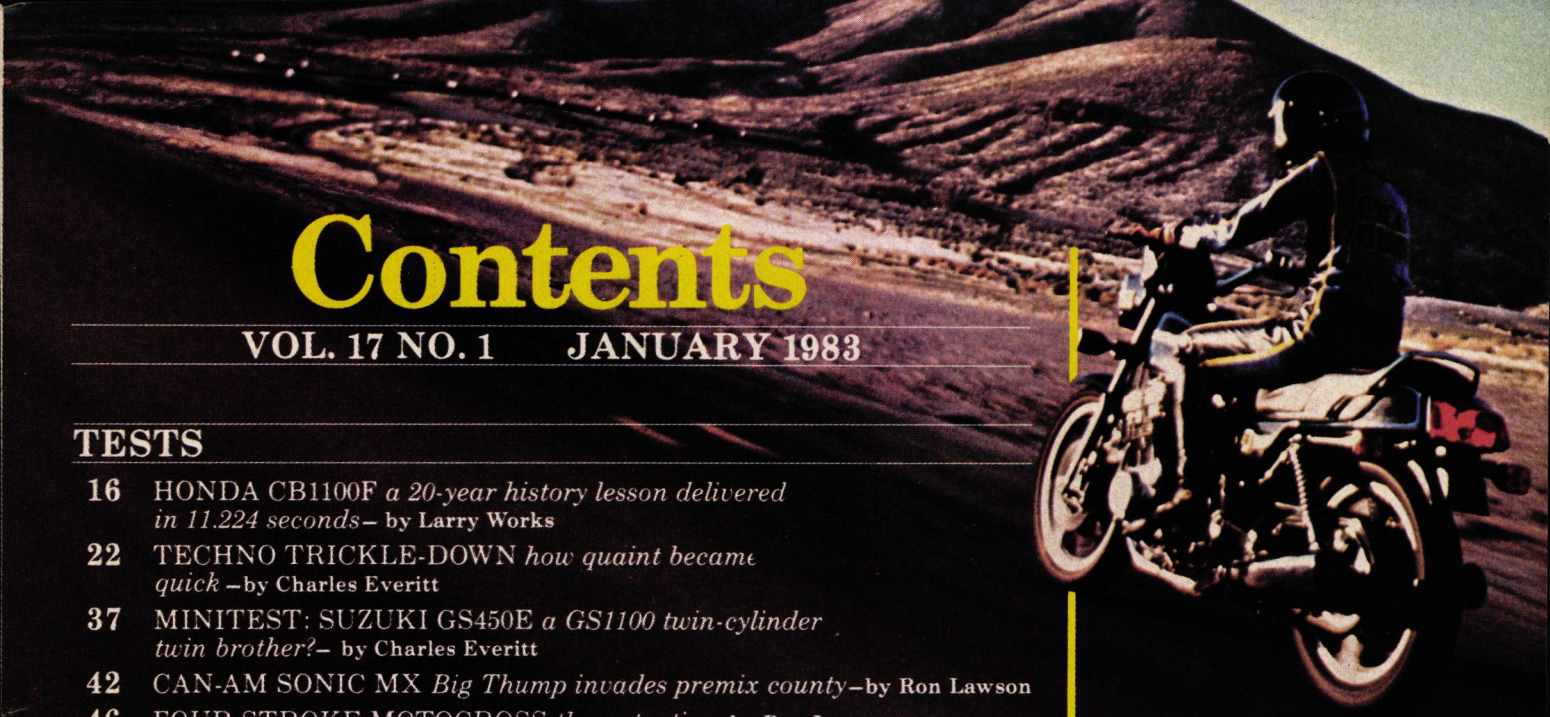

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QUOTE:
"I sat on my borrowed Honda 185S and listened, only half interested. You see, I wasn't really one of these guys. I was from the Other Side—a *motorcyclist*."

–Pg. 38

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ON THE COVER:
A proud parent watches while its first-born CB1100F comes into the hyperbike world. Delivery by Dr. Chris Eastman.

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We will send to each reader of this publication who reads and responds to this test before midnight January 9, a 62-piece American and Metric Heavy Duty Industrial tool set and metal storage chest containing all the basic and special tools necessary to service and repair domestic and foreign trucks, tractors, autos, and all heavy industrial machinery. Consists of: 7 American 3/8 inch drive sockets. (3/8''), (7/16''), (1/2''), (9/16''), (5/8''), (11/16''), (3/4''). 9 American 1/4 inch drive sockets. (3/16''), (7/32''), (1/4''), (9/32''), (5/16''), (11/32''), (3/8''), (7/16''), (1/2''). 9 Metric 3/8 inch drive sockets. (9MM), (10MM), (11MM), (12MM), (13MM), (14MM), (16MM), (17MM), (19MM). 9 Metric 1/4 inch drive sockets. (4.5MM), (5MM), (6MM), (7MM), (8MM), (9MM), (10MM), (11MM), (12MM). A 3/8 inch fine tooth ratchet with quick release drive combination-forward and reversible, a 1/4 inch x 3/8 inch adapter, a 3/8 inch drive extension bar 3 inch. A 3/8 inch spark plug socket with oil resistant insert and speed installation and removal. An 18-piece industrial steel ignition wrench set, complete set of spark plug gap setting gauges for any type of spark plug. One ''1/4-drive'' heavy screwdriver, (1) One large set of feeler gauges, industrial ''Phillips'' heavy duty and ''regular'' screwdriver. All tools are drop forged alloy steel for durable heavy duty repair work, and will be accompanied with a LIFETIME Guarantee that it must perform 100% or it will be replaced free. Add $7 handling and crating for each Tool Chest requested, we pay all shipping. Should you wish to return your tools, you may do so for a full refund. Any letter postmarked later than January 9, will be returned. LIMIT: Six (6) sets per address, no exceptions. Send appropriate sum together with your name and address to: Tool Test Dept #101YW, *Viking Ind.,* 6314 Santa Monica Blvd., Los Angeles, CA., 90038, or for fastest service from any part of the country, call collect before midnight 7 days a week.

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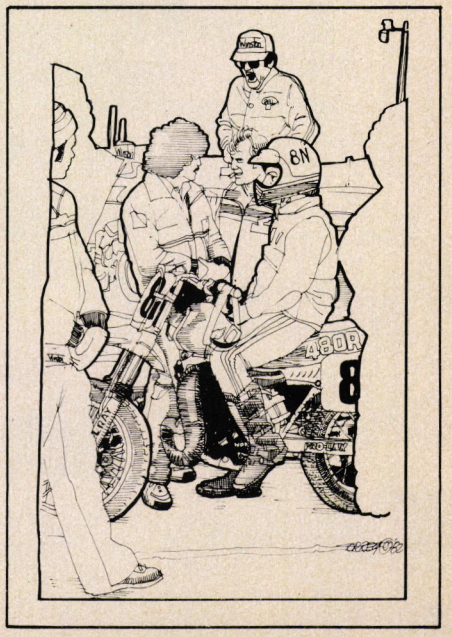


Setting It Right

Pros And Confidence

The riding school is always in session.

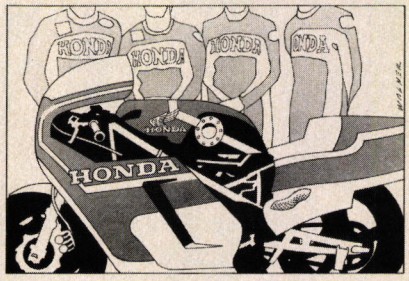
• I could do with some lessons in motorcycle riding. I have been at it now for 30 years, but some people never learn. The problem in this case is a less personal one: There is no one who teaches.

But how can motorcycling be taught? Certainly not from the pillion, nor entirely from books. Must we go back to the old master-and-pupil techniques, where the teacher says "Do this," and demonstrates, while the pupil tries and falls flat on his face? It is not a good system.

Many police riders are trained by the convoy system, riding in single-file with an instructor at each end, trying to see what the one at the front does and why, and being corrected afterward by the one at the rear. It might not be an ideal system, but it seems to work: It turns out some excellent professional riders. But where are the professionals who will instruct us amateurs? The racing schools are not much use in this: They teach racing lines and racing tactics, whereas what I want to learn are the techniques by which to become fast and faultless on the open road. All I can hope to do is find tuition wherever my eyes or ears indicate that a lesson is available. Seeking the company of a good professional often pays such dividends, as it did when I joined a bunch of British bikescribes visiting Pirelli to try the latest Phantom tires.

We went to Pirelli's test track at Vizzola in northern Italy. In reality it is much more than a test track; it is an open-air laboratory, one of the best-designed and -instrumented tire-developing establishments in the world, as it has been since it was opened in 1971. On this day, however, the cars and telemetry devices were put aside. This was to be more of a romp, on such an assortment of motorcycles as might water the mouth of any keen rider. The least of them was a V50 Moto Guzzi; at the other end of the line stood a rank of the latest Jota 120s from Laverda.

That was the one on which to concentrate; not only was it the fastest and most glamorous thing there, but earlier versions had been wickedly sensitive to tires. On the latest tubeless Phantoms, I had to agree that its behavior was flawless. On fast straights, through sweeping bends and deliberately restrictive chicanes (set up at points where Pirelli did not want us mangling the Armco) the big Laverda went beautifully—even, at last, through my *bête noire* hairpin.



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I had come unstuck on this corner before. It is an uphill, 180-degree corner, very tight in radius and with severe camber variations built into its contours. The first time we met, I was in a Fiat Abarth 131 rally car, years ago, which spun as soon as I lifted off to see which way the road went; and ever after, I had approached that hairpin with trepidation. It was the same on two wheels, and in the middle of that turn I had misgivings about the Jota's handling.

There was nothing wrong with the bike; the truth was I was too slow. A lap later, as I approached the turn again, I was overtaken by another Jota, ridden by Pirelli's chief test rider, Claudio Mazzari. He showed me the way around, and the lesson was salutary. I can ride 'round that hairpin now, or drive a car 'round it, respectably fast. My phobia has gone.

One can always learn from a real master. Just as the greatest singers still take lessons, because the coach provides them with another pair of ears, so one can always profit from another rider's experience. That is something Mazzari has in abundance. This beefy, bearded fellow, in his thick and weathered but only mildly scuffed leathers, covers a colossal annual mileage for Pirelli, much of it in Sicily but also on the mainland and all over Europe. He is the sort of professional whom it is a joy to watch, as well as an education. He rides very fast, but quietly, with the smoothness and lack of apparent effort which can only be bred by complete conviction, in turn founded on prodigious experience. He would ease his Jota up to the track entrance, wait for a gap in the traffic, and then *move*. Somehow one was not conscious of any noise; in a couple of seconds he was tucked down in a racing crouch that belied his *embonpoint*, and thereafter one was not aware of him moving, either, though ears akimbo caught the fleeting sound of snap gearshifts. At the end of the long straight, he stopped being a rocket; through all those curves he was a tracer of surely the most beautiful expressions in mathematics, a link between space and time, at once artist and brush.

He did not go unchallenged. Some of the British biking journalists think they are fast, and some of them are. One young scruff in particular was having a great go—only to be gently reeled in by Mazzari with all the suavity of one who, having caught him, would then throw him back. When they came in, I felt the pressman's tires, which were hot; Mazzari's were merely warm, although he had been lapping faster on identical equipment. I needed nothing so precise as a thermocouple to confirm what my hand could tell me as plainly as my eye.

What a contrast, between this gentleman and everyone else present! Britain's bikescribes do not, on the whole, present themselves as a regular and reputable set of sobersides, and the team in attendance from Moto Guzzi looked little better kempt. The Pirelli eggheads on parade—Gori, Torchi, and especially Dottore Giancarlo Armellin—were all courteous, studious and smart in that nicely understated way that expresses good North Italian manners; but Piero Laverda seemed positively patrician. He is a tall man, refined of expression, elegant of carriage, beautifully dressed and impeccably groomed. He converses easily in well-schooled English, hesitating only when plunged by an unrelenting Setright into a review of secondary vibrations and couples in three-cylinder engines. His spectacled eyes could be a marksman's, his manicured hands a musician's; but it turns out that he has other skills to deploy. . . .

When he finished chatting to everyone about his latest product, when there was still a little time in hand, when our youngest and hairiest tireburners were working themselves into paroxysms of joy with the Jota and frustration with Mazzari, so confident now in the Phantoms that they felt ready to try yet harder everywhere, Piero Laverda decided to relax a little. He shed his finely tailored overcoat, borrowed a windproof jacket, pulled on a helmet and gloves. There was a Jota free; he straddled it, settled into it, became a part of it. He then went out onto the track, just like that, in his pale worsted trousers and his polished city shoes, and outrode *everybody.*

—L.J.K. Setright

West's Side

Bnnt

When life goes out of tune, reach for the musical pliers....

• *Pnnk – pnnnnk – plinnn – bnnt – pnnnn. . . .*

You know the sound. Tuning your spokes.

And like the days of your life, some spokes are winningly in tune, others need attention—while one or two defy all forbearance.

Well, I was having a day of the latter type, a *"bnnt"* of a day. Money worries, y'know—people owed me money and weren't paying up. Emotional worries, y'know—people owed me affection and weren't paying up. Cosmic worries, y'know—God owed me *Something Big*, but wasn't taking my calls.

When life reaches that kind of impasse, it's time for desperate measures. It's time, no less, to go tune your spokes.

And it was no mistake, either. Those spokes couldn't carry a tune, couldn't even remember the composer's nationality. When I heard how badly out of tune they were, I had immediate cause for gratitude. Very clearly, it had been a *long* time since my last *"bnnt"* day.

In any case, I was sitting there in this dark, filthy dungeon of a garage, mere inches above the very sump of all Manhattan, going *pnnk, plnnt, pnt*. . . . So this was what life had come to. I had time to think—never a good sign.

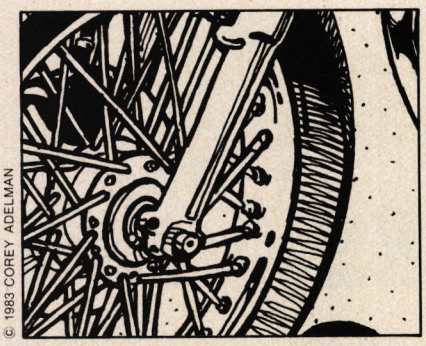
But you know what it's like when you loan a guy a chunk of money because he's such a good friend and he's in oh-such-terrible times . . . and then you find out he's into everyone else you know for all he can get, there's not a chance in hell of him paying any of it back . . . and come to think of it, it's been awhile since anyone has seen him. . . .

Plnnn, pnnt.

And you know what it's like when you meet a beautiful woman waiting in line at the supermarket, she's built like a nine-course meal, tax and tips included, and every time you try to be funny, she smiles at you like a letter from mom . . . then you find out she works for Prudential, she wonders if you might be interested in a piece of the Rock . . . and about Friday night, she'd adore to, but she really can't . . . she's engaged . . . to a cop. . . .

Pnnnk.

And you know what it's like when you begin taking stock of things . . . you're getting older and it isn't happening the way you planned it . . . you were supposed to have more dollars than aspirins by now,



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there was supposed to be a second house in the country, and a dog to match . . . life was going to make sense by now—in fact, by your last birthday—yet you still feel like you're at summer camp . . . except now, summer is almost over. . . .

Plnt, pluuun, pling! (At last, a good one.)

Well, I continued to work around the front wheel of the bike, one spoke at a time. And my thoughts revolved more slowly as I went. With each little tap of the Allen wrench on a spoke, I began to concentrate a bit harder, listen more closely. Another little tap and a simple twist of the pliers on the spoke nipple—yes, I use pliers, and if that isn't sophisticated enough for you, be glad I'm not using an axe—and the tone of the spoke would go up a step. Twist it the other way and it went down a step. Happened every time. Science marches on.

And my hands were getting quicker now, more accurate. After a while, I didn't even have to draw the pliers back every time and twist them in the air, as if tightening an imaginary nut. I already knew—turn it this way and the spoke goes up a tone.

Very gradually, I began to be lost in it at last, the wonder of *The Process*. Don't ask me how it works—and if you know, for God's sake, don't tell me! I'm much happier not knowing. To me, it's just magic.

Yet you have no idea (or then again, perhaps you *do*) what a magical, profound effect out-of-tune motorcycle spokes can have on existential despair. A single tap of an Allen wrench on a spoke, and you forget all about the nuclear holocaust going on upstairs.

After about 20 minutes—which should give you some idea just how horribly out of tune those spokes really were—I could spin the front wheel around with the Allen wrench against the spokes, and listen to music. There were still some flats and sharps, but they were no match for my musical-pliers.

But the rear spokes presented a different problem. They were covered in months of gludge, bat-dung and chain-lube. (About motorcycle maintenance, you see, I really am a pig.) *The Process* now involved High-Tech materials—a can of solvent and a shop-rag. So be it. It worked just as before, I was still utterly lost in it. My hands had taken me over. The entire real world consisted of gummy black goo on motorcycle spokes. A quick jerk of the solvent can against the rag, more gummy black goo . . . and down in the depths of the grimy dungeon of a garage, time raced by. One after another, the rear spokes emerged into the light, shining and ready to hum. The Allen wrench and pliers returned for an encore. I sat on the cold concrete, *pnnk, plnnnt,* having the absolute time of my life!

And after a time, I was spinning the rear spokes against the Allen wrench and listening once again to music. The chain made a slushy sound on the rear sprocket, like slushing oatmeal between your teeth—sounded fine. Yet up near the tensioner, it was a little pot-bellied. So I adjusted the chain to within an inch of its life, and added enough chain lube to insure a decent yield of gludge next time I tuned the spokes. Finally—since I'd gone this far already—I began soaping off the whole critter, rinsing it off, waxing it wherever applicable and rubbing in chrome cleaner and Armor All everywhere else.

By the time I'd polished the entire affair to a blinding gleam, the world seemed a pleasing, promising, utterly fine place once more. With effort, I managed to dredge up what had been bothering me before—yet why it had bothered me so terribly was now a complete mystery. Sure, I'd misjudged the trustworthiness of a "friend." Yes, I'd had a thoroughly ludicrous experience in a supermarket line. On the other hand, I had plenty of aspirins and no mortgage to pay on a house in the country. Swell.

And now, I had a motorcycle with shiny new spokes that could play Beethoven. I rode up out of the garage into daylight, prepared for a nice long ride, and no matter how carefully I listened, in all the world there was not a *bnnt* to be heard.

—Ted West

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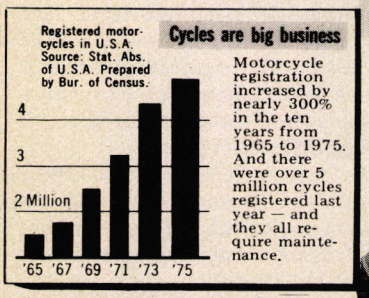
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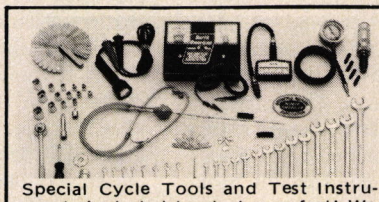

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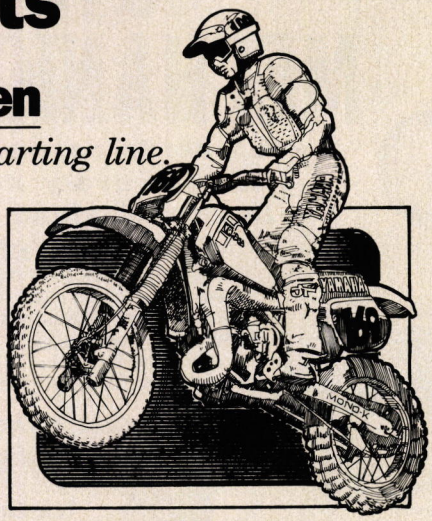
Motocross At Eleven

Two-wheelers on the TV starting line.



• *How come*, we get asked, there isn't more motorcycle racing on television? Or more motorcycle *anything*, for that matter?

Seems that all we can expect is the same old parade of banal stereotypes—the standard-issue Visigoths raping and pillaging their way through our peaceful hamlets. Yawn.

Maybe it's still 1955 in the network boardrooms. But let's face it; track records weigh heavily in programming choices made at the check-signing level. And when you review the profitable releases of motorcycle-related productions, racing or otherwise, it's a mighty short list.

Bruce Brown's "On Any Sunday," made in 1970, beyond being the Best Motorcycle Movie Ever Made, is perhaps the only one even to approach the profits that the entertainment marketing system demands. Another film, made at nearly the same time, was to become the example that would effectively stymie production of motomovies in the Seventies. "Little Fauss and Big Halsey" was released to an absence of critical raves and box-office response. And though Robert Redford wasn't then quite the big star he would become, the film was cited as a good reason to avoid motorcycle racing as feature material.

There are obvious differences, of course. As an independent film-maker, Bruce Brown faced no studio chain-of-command to clutter and confuse his efforts. Also, he was a rider, with respect for the athletes who race bikes. And he was a fan; that's what showed in his film—enthusiasm from both sides of the camera.

It's hardly surprising to find a shortage of Bruce Browns working in television. Individual originality and ability seldom are encouraged, and neither is risk-taking on subjects considered out of the mainstream. So motorcycle competition exposure has been limited to occasional sports coverage, usually as filler between the exciting stuff like arm wrestling and pocket billiards—and usually with expert commentary from some former car racer who once rode a moped.

But how come there's so much car racing on television? *We* know that bike racing, in any form, is a helluva lot more exciting than cars. At least we can see actual human forms on a motorcycle, visibly doing what it takes to get around the track. But the faceless, formless, enclosed car dudes get all the coverage.

Naturally there are heaps of socio-economic factors to account for this situation. Permit me to offer here my own condensed clump of four: inertia, identification, merchandising and convenience.

Inertia: Cars have always been more popular, read *numerous,* than motorcycles. Still are and most likely always will be. No external force has deflected, or even seriously diluted, the car habit.

Identification: Most of us own cars, and many of us know how to drive them. But we are all certain, way down deep, that given the opportunity/time/money/ we could stuff Richard Petty into the weeds. Televised car racing permits us some vicarious fulfillment of that wish. Far fewer among the general audience figure they could do likewise to Ken Roberts, Brad Lackey or Bruce Penhall.

Merchandising: Given the viewer numbers compiled by inertia and identification, auto racing is a good video billboard for beer, cigarettes, tires and so forth. Motorcycle racing has yet to convince enough big advertisers that it can produce the numbers consistently.

Convenience: Car races are easy to produce, in terms of TV technology, and easy to watch. They offer comfortable background for reading, whittling, doing needlepoint, etc. Sort of like fast foods; Indianapolis is a giant Big Mac.

Okay, we know all the reasons we haven't made the Big Time on the tube. But what about the future? Glad we asked. Because I think it looks damn good. Remember, television is only about 35 years old. And American motorcycle racing grew up in roughly the same period. Now, as our racers achieve world prominence and motorcycle racing gains wider credibility, the timing is right. Television and motorcycle racing seem just about ready for each other.

But as usual there's a glitch. Until there is a strong, efficient, national organization to represent the sport, televised competition will remain piecemeal. A single sanctioning body, able to balance the needs of racers, fans, promoters and advertisers, is an absolute prerequisite.

And there are other difficulties. The work of transferring the excitement of bike racing to film or tape is not simple. It requires more cameras, more expensive gear (video and audio), better directors and bigger chunks of time.

Take for example "The Superbikers," a tailored-for-TV production, with the world's best riders from all types of racing, steely eyed and determined to grab the top share of $50,000. Sounds great, but how does it come across on the tube? A lot like watching alfalfa sprout. It seems like ABC sends out the second string, throws in the camera helicopter for drill, and slaps together a perfunctory collage of action snippets and semi-informed commentary. But maybe the TV-tailoring is at fault as much as the coverage.

Stadium MX is best-suited to conventional television. The action is contained and intense, and because TV is familiar with stadium events, the coverage is good. At home you get a closer view, from more angles, than anyone in the stands. The frenzied roar of 70,000 fans might not bring the same rush in your livingroom, but you didn't have to face a long drive and a hassle for parking. And if you live in Nishnabotna, Missouri, the television version is welcomed stuff.

Still, stadium MX is not The Real Thing. It's motocross on television's terms rather than the other way 'round. So what? At least it's a start. Maybe. A good start if it leads to more and better coverage of other forms of racing; a false start if it doesn't.

With the advent of mini-components and computerized video, the technology now exists to present the graphic excitement of racing in wholly new ways, not on traditional TV terms. And I'm sure the writers/producers/directors who can apply those techno-electronics are waiting in the wings, because I happen to be one of 'em. And with the expansion of cable TV, satellite transmission and home video cassettes, the programming possibilities have grown enormously. So it's only a matter of time until you find Roberts grinning at you from the cover of "TV Guide."

Place yer bets. —*T.J. Rafferty*

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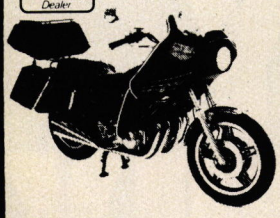

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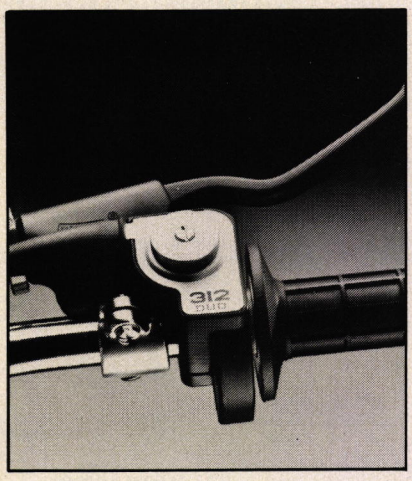
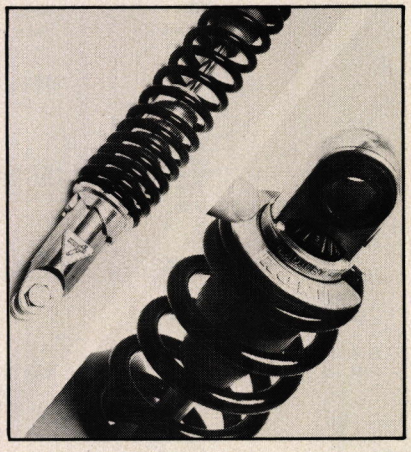
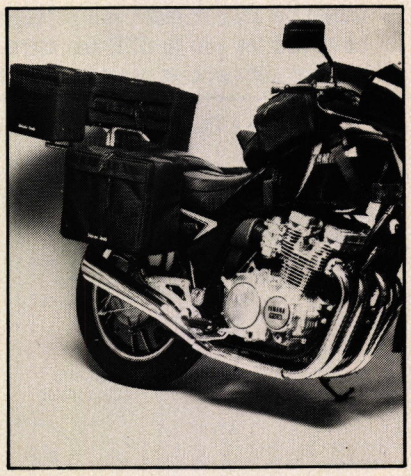


Dualing Throttles: For the dirt rider who wants to compete both in enduro and motocross events, Magura has introduced the 312 Duo throttle assembly, which has two throttle-opening ratios. Magura claims no tools are needed either to switch ratios or for cable replacement, and the internals are protected by a rubber gasket under the cover. Suggested retail price of the throttle is $27.71, and it's available at motorcycle dealers or from Magura U.S.A. Corp., Dept. CG, P.O. Box 68, 2 Union Drive, Olney, Illinois 62450.

Adjustable Konis: Adjustable suspension is all the rage, and Koni is getting in on the act with a new-series shock absorber. The 7610 shocks' four damping positions are controlled by an external selector disc, and the shocks come with Koni's progressively wound Tri-Rate springs and a preload collar adjustable to three positions. Suggested retail price is $99.98 each, and they're available for BMW, Ducati, Honda, Kawasaki, Suzuki and Yamaha motorcycles. To find out more, write to Koni America Inc., Dept. CG, P.O. Box 40, Culpepper, Virginia 22701.





Bulletproof Bags: Well, not precisely. Actually, this new soft luggage from Malcolm Smith is made from ballistics nylon that is claimed to be tough, easy to keep clean and won't collect dust and dirt like the more common cordura-construction bags. Suggested retail prices for the MS luggage are $149.95 for the saddlebags, $89.95 for the tank bag and $74.95 for the trunk bag. For more information, contact your local motorcycle dealer or Malcolm Smith, Dept. CG, 7653 Indiana, Riverside, California 92504; (714) 687-1300.

Wingstand: Before you put another half-hitch in your back trying to get that Gold Wing on its centerstand, consider Kerker's Levelift. The Levelift's feet automatically align with the ground, and rocking the motorcycle from side to side activates the stand's internal jacking mechanism. And when you shove off, the Levelift retracts its legs, returning to normal position. Suggested retail price of the Levelift is $189.50, and it's available for Gold Wing, Aspencade and Interstate Hondas. For more information, write to Kerker, Dept. CG, 7900 Deering Ave., Canoga Park, California 91304.

Floatin' Rotax: White Bros. claims to have built the ultimate four-stroke off-road bike with the Formula 4 Floater. Pieces include a 52-horsepower Rotax engine in a C&J Floater frame, suspended by a Simons UDX-60 Fork and a White Power GP shock, all with a claimed dry weight of 245 pounds. Suggested retail price is $5995. A $3000 deposit is required, and delivery time is six weeks to two months. For more information, contact White Bros., Dept. CG, 11750 Seaboard Circle, Stanton, California 90680; (714) 895-1991.

CHiP's Lids: Even Rodney Dangerfield could get some respect if he wore an Ampro CHiPs-style helmet. This shorty helmet has a Lexan shell and an optional visor, and is available in three color schemes: dark blue on light blue, brown on gold, or white on black. Ampros come in Small, Medium, Large and Extra Large sizes, with a suggested retail price of $49.95. For more information, write or call Van Leeuwen Enterprises Inc., Dept. CG, 13275 Paxton Ave., Arleta, California 91331; (213) 896-2200. ●

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CYCLE GUIDE
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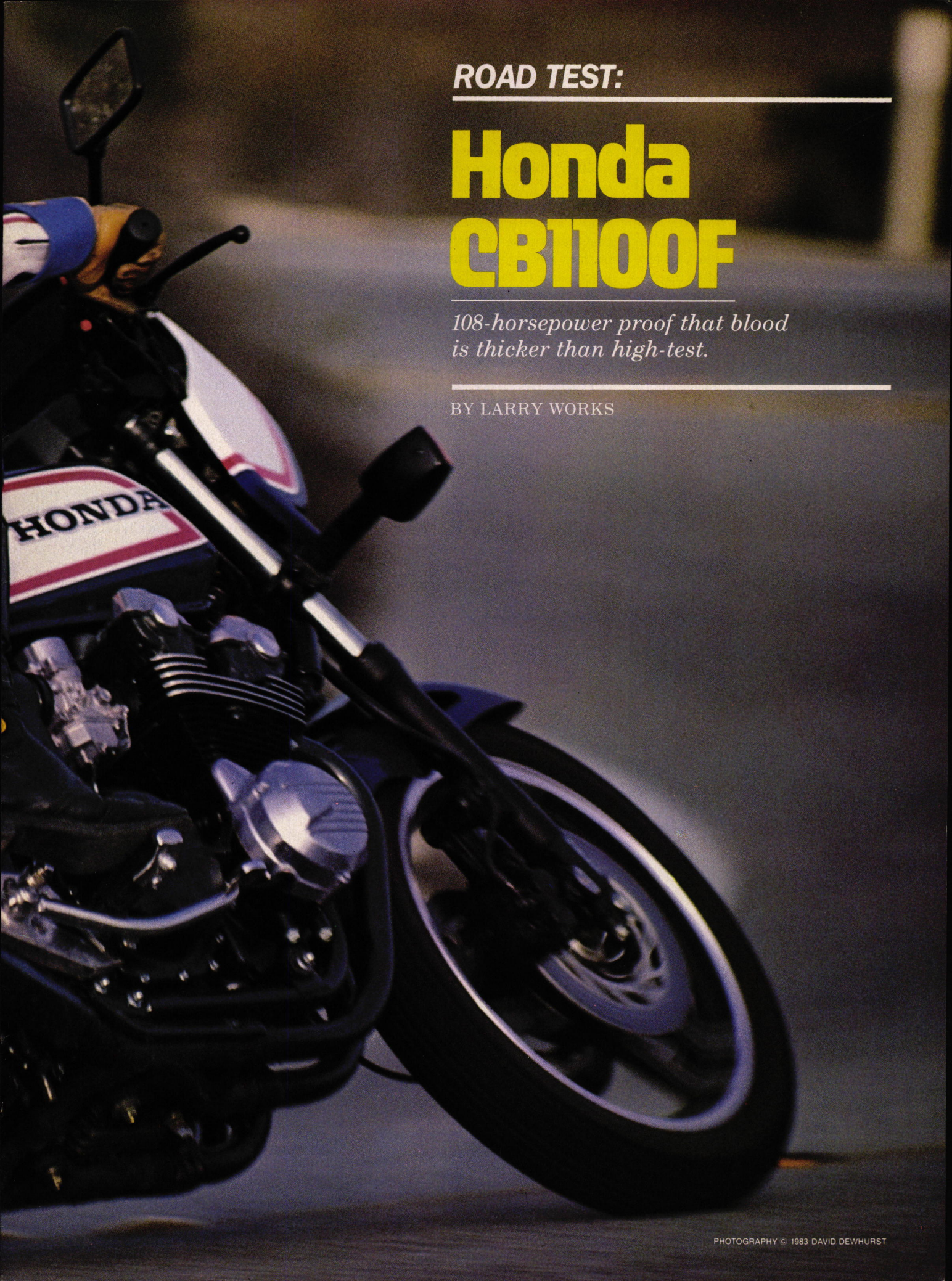


ROAD TEST:

Honda CB1100F

108-horsepower proof that blood is thicker than high-test.

BY LARRY WORKS

PHOTOGRAPHY © 1983 DAVID DEWHURST

Breeding will tell. Always. Even the finest of sow's ears looks not much like a silk purse. More to the point, it doesn't work much like one, either. And in motorcycles, as in the pigskin purses of fables, the same holds true.

There's no better example than the '83 Honda CB1100F, replacement for the now-discontinued 900F. Aside from its racy quarter-fairing, the 1100's general lines should seem more than familiar; by now they're practically a sport-riding institution. Both the styling and the technology trace back beyond the 900F to the first twin-cam 750F, the fastest, best-handling 750 that 1979-dollars could buy.

The 1100F's background extends even further, though, to Honda's racing efforts of the mid-Seventies—or -Sixties, depending on your point of view (see "Trickle-down," page 22). From there, this hyperbike's family tree spreads out to include the '79 Euro 900F, the U.S. 900F two years later, the Euro CB1100R street-racer (November 1981 issue) and to a stable of winning endurance roadracers and Superbikes in what has to be one of the most successful applications of a single, basic design to a variety of motorcycles.

In short, breeding.

The basis for the bloodline is a DOHC, 16-valve four, the brainchild of Shoichiro Irimajiri, Honda's vice president of research and development. And remarkably, through 750cc, 900cc and 1100cc configurations, the F's lineage has remained largely intact, even down to such specifics as bore centers and internal gear ratios. So the engine that powers the 1100F you see here is, both in appearance and specification, pretty close to that 1979-vintage 750.

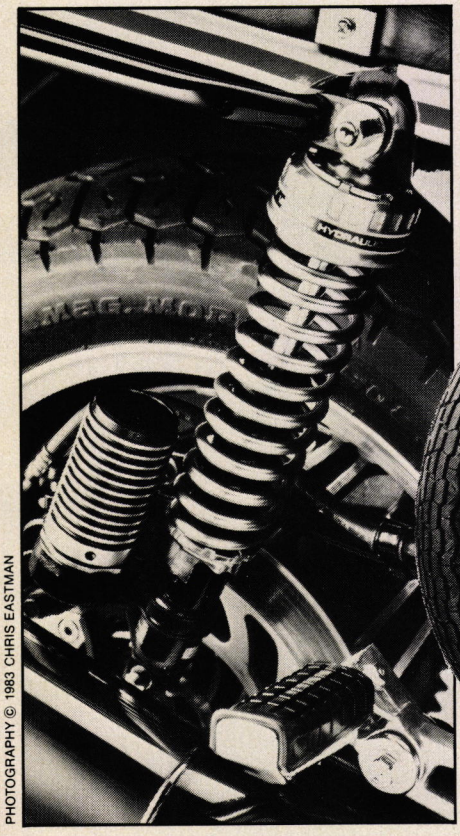
But being able to draw on a family tradition is not the same as being saddled with one, and the F hasn't suffered because it lacks new-from-the-ground-up status. Labeling this HyperHonda as merely a rehash of existing machinery not only misses the point, it sells short a terrific motorcycle. Granted, the 1100F builds on the F heritage, but it's not just a warmed-over 900—or a slightly underdone 1100R, for that matter.

Truthfully, though, the level of sheer, heart-pounding performance the F offers is not the result of radical alteration of the F/R formula; it's the natural extension of it. That performance can be accounted for by a comprehensive recalibration that includes change, literally, from one end of the bike to the other.

To get the F up into the liter-plus engine class from a starting point of the 900, bore size was increased 5.5mm, jumping the displacement to 1062cc—the same, slightly oversquare (70mm x 69mm) dimensions as the R. Higher-lift cams than the 900's—higher, even, than the R's—are part of the F's performance package, as are R-spec valve timing (greater duration than the 900's) and slightly juggled ignition timing. Like the R, the F has 33mm constant-vacuum Keihins handling the fuel-mixing, though unlike its racier cousin, the F's carb bank includes an accelerator pump. Also unlike the R—and in keeping with the 900's design—the 1100F's engine-mount system uses rubber cushions to deaden vibration. And in compression, the 1100F's 9.7:1 ratio strikes a middle-ground between the 900's 8.8:1 and the R's 10.1:1 ratios.

But while the F splits the difference between 900 and 1100R in some specifications, it breaks with the 750/900/1100R tradition in steering geometry. All the F-series bikes (and the 1100R as well) have hit the road with steering heads fixed at 27.5 degrees. The 1100F got one more degree of angle (and 10mm more trail than the 900) to add a note of high-speed stability to the quick steering that also was a part of the entire F/R series. In addition, the 1100's steering head was lengthened and moved 10mm rearward from its location on the 900, and its triangulation to the frame tubes was strengthened. As a result, with the 900-spec 39mm fork tubes (the R had 37mm tubes), an integral fork brace and the reworked steering-head gusseting, the only flex the 1100F front end provides, even in panic braking, comes from the rider's biceps.

Something else missing from those aforementioned panic stops is excessive front-end dive. The 1100F fork incorporates two of Honda's Torque Reactive Anti-dive Control (TRAC) units to keep it from slamming to bottom under hard braking. Unlike other anti-dives now in use, the TRAC system employs mechanical actuation, not brake-line hydraulic pressure, to accomplish its goals. A mechanical linkage located at the bottom of each fork leg uses caliper torque-reaction to close a small damping valve in each TRAC unit, which in turn restricts the rate of fork compression to one of four preset levels. The system also has a bypass, so that should the front wheel hit a sizable bump while the brakes are applied and the TRAC is functioning, hydraulic pressure inside the fork forces the damping valves to open, allowing the fork to compress naturally. But when the front brakes are not in use, the system is passive and does not affect the fork's damping.



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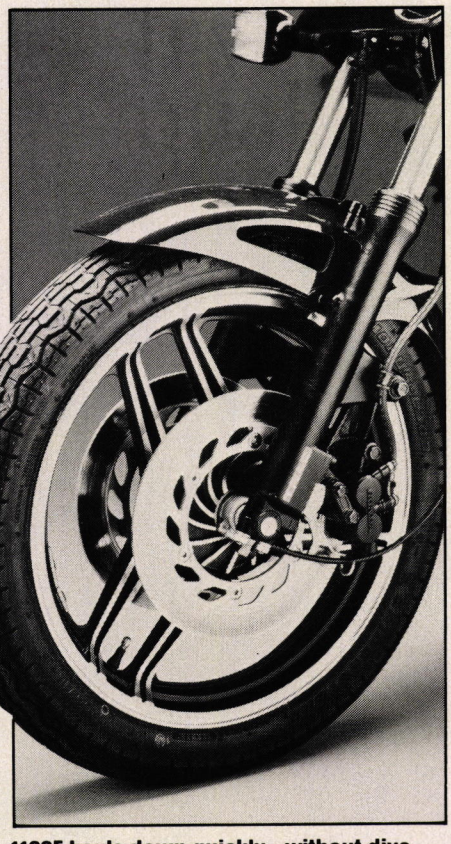
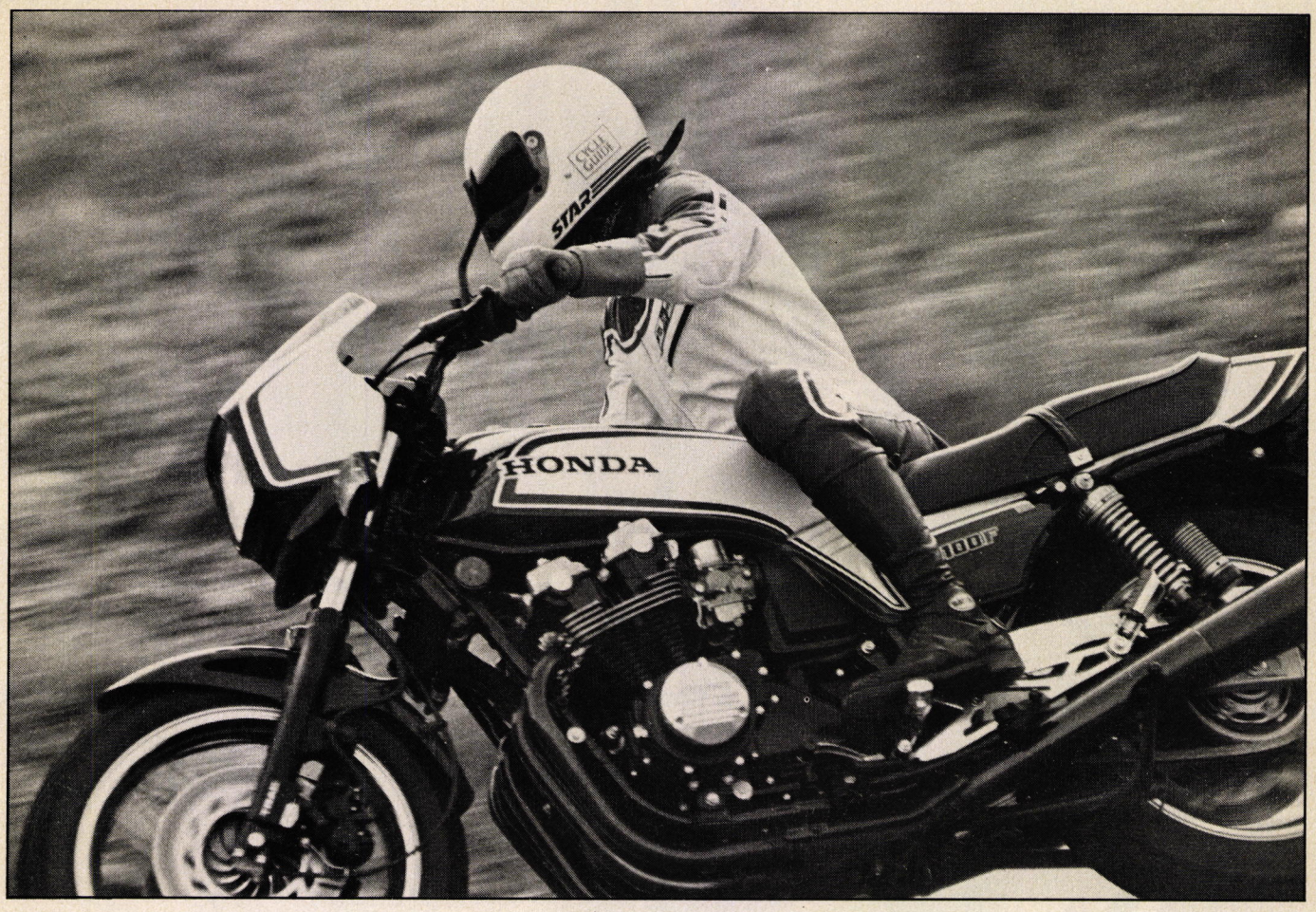
Showa shock allows wide-band riding

And damping adjustment without tools.



1100F hauls down quickly—without dive

Thanks to twin TRAC and twin pistons.



Another break with the standard F/R formula can be found in the F's wheels, which are cast alloy, as opposed to the compound-type ComStars used on the earlier F-series bikes. And not only are the wheels cast, the wheel diameter has been decreased by one inch both front and rear. But it isn't just change for the sake of change. You don't tinker with tradition without good reason. No, the 18-inch front and the 17-inch rear that accompanies it are a link with roadrace technology. The smaller front wheel produces less gyroscopic effect than a larger one would, making the motorcycle easier to turn or flick side-to-side at speed.

And speed, and attitude at speed, are a hyperbike's stock-in-trade. It's precisely there, at the far edge of street performance, that the F is not resting on any accumulated family laurels. It's perfectly willing to rip off 11.2-second, 120-mph quarters all day long—or to convince you that someone turned your favorite section of twisty backroad into a short-course by compressing all the straightaways. But while that empty stretch of backroad might seem strangely abbreviated from the saddle of the 1100, how the bike attacks the corners is completely familiar: It's standard-issue F-model handling.

In the context of the competition, Honda's CB1100F is not merely brilliant; it's the performance value of the year.

Since the very first 750F, the entire series has been blessed with absolutely dead-neutral steering. No evident roll-steer; no tendency to highside. It's the kind of confidence-inspiring feel through the handlebar that allows you to push hard through a corner with complete ease. You know exactly where the motorcycle will go, because it tracks exactly where you point it. And smaller wheels and recalibrated steering geometry notwithstanding, the 1100 engenders that same sense of control.

Both the geometry changes and a slightly more front-loaded weight bias require a bit greater effort than on previous Fs when initiating a turn or making quick transitions through a set of esses, but the same precision is there. You can flop the F over until the undercarriage gouges the pavement—footpeg and exhaust pipe on the right, and a three-point touchdown of peg, centerstand foot and centerstand tang on the left—without moto-gymnastics. Which is not to say the F is short on ground clearance; it's not. It's just that the bike is perfectly comfortable at extreme lean angles. With the Bridgestones properly warmed, the fork set at 6-8 psi and No. 3 damping, and the shocks set at No. 1 compression damping (nothing we did seemed to require the No. 2 setting) and No. 2-or-higher rebound damping, the F stands equipped for cornering precision. Only running over vagrant pebbles or snapping the throttle shut in the middle of a turn produces the slightest twitches or chassis gyrations, and even then the F pulls immediately back on line.

You can carry a lot of speed into a corner as well, since the excellent twin-piston brakes scrub it off in a hurry. Hard braking is aided even further by the dual-TRAC system, which reduces the rapid geometry changes that accompany front-end dive. But with the TRAC system dialed-up to its higher settings, the bike doesn't *seem* to be slowing down as quickly as it really is; the normal sensations of braking—dive and perceived weight transfer—aren't there. The F stops, and stops well, but you have

Continued

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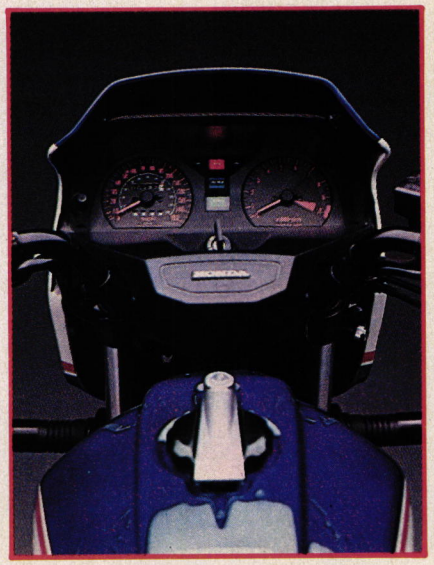
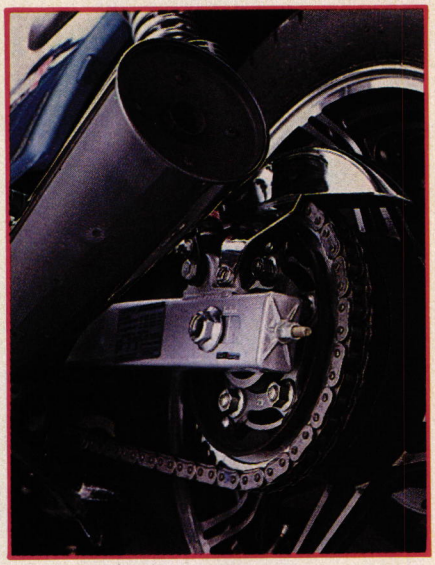
Aluminum fork brace is OEM on F

So that fork-flex isn't.



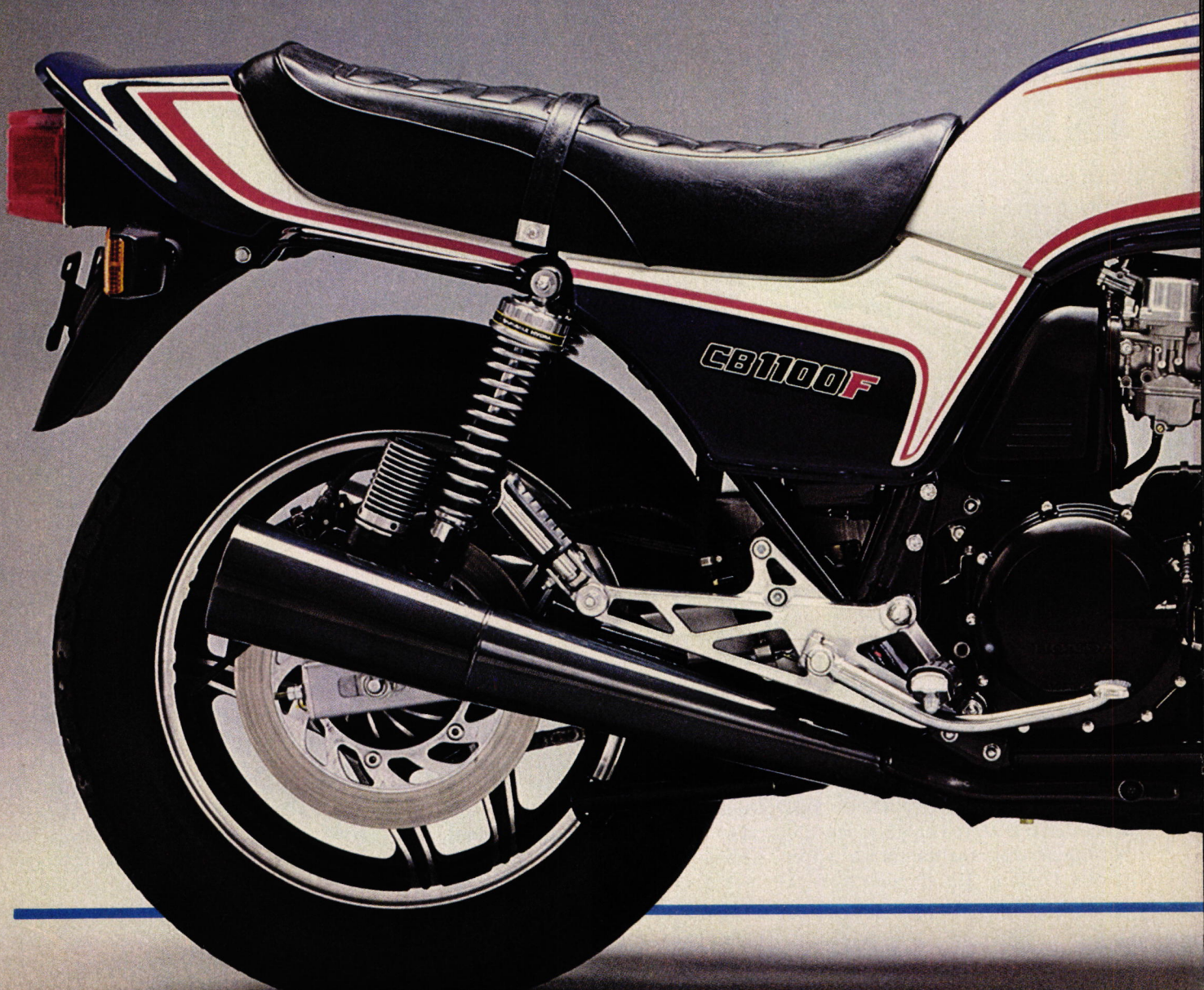
F's refinements include 150-mph speedo

And the speed to use most of it up.



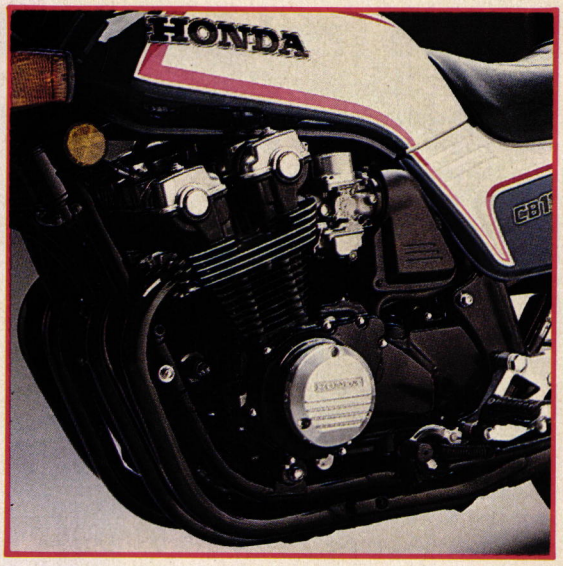
Black pipes hide box-section swingarm

Stronger, but still not aluminum



13-degree adjustment in each handlebar suits variety of riding styles

Custom-tailored to your sleeve length, while you wait.



16-valve DOHC Four seems very familiar

In everything but performance.

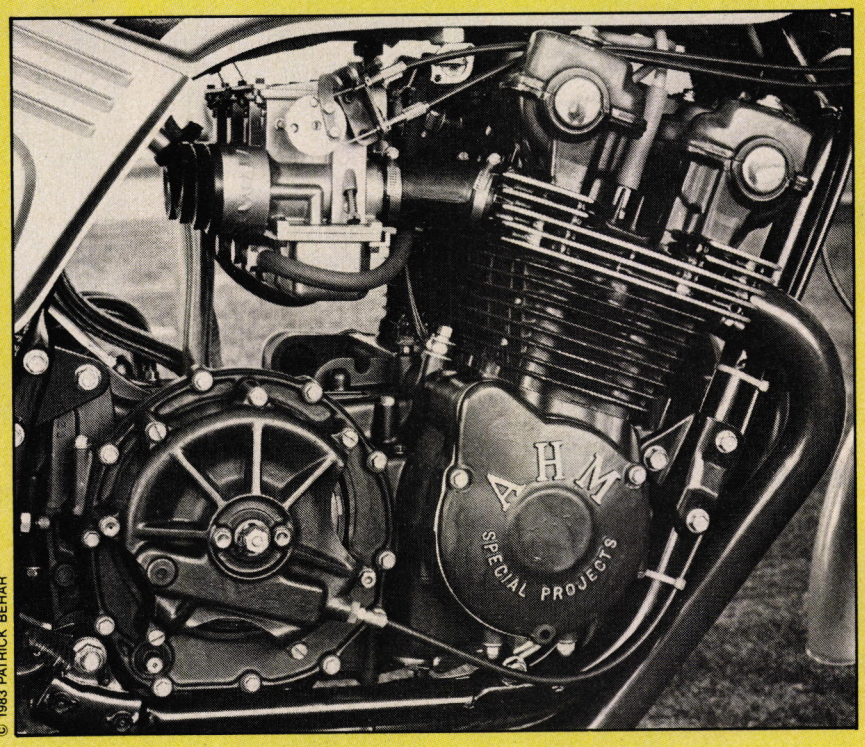
Techno trickle-down through two decades.

• Quaint is hardly a word you would normally associate with Honda technology, but in the case of the 16-valve, DOHC, transverse four-cylinder family of Honda engines, the term is almost appropriate. These engines—in 750cc, 900cc and, this year, 1100cc displacements—have roots that extend back more than 20 years, to the very beginnings of Honda's heydays of Grand Prix roadracing. Then the "quaint" epithet was directed primarily toward Honda's use of four valves to route intake and exhaust gases through the cylinder.

The four-valve head, which was to become a linchpin in Honda's approach to extracting power from an engine, was a technological dead-end as far as the Europeans were concerned. An engine's horsepower output is proportional to BMEP (Brake Mean Effective Pressure, a measure of combustion pressure within the cylinder) multiplied by rpm; increasing either will produce a corresponding increase in power. The accepted European method of tuning involved raising BMEP; that is, stuffing more mixture into the cylinder, by way of more radical cam timing and a heavy dependence on intake and exhaust tract resonance, all of which narrows an engine's powerband. Honda's route to power, however, took the alternate path of raising rpm. To do so would require smaller, lighter reciprocating pieces inside the engine, which with a given displacement means part multiplication—pistons, valves and so forth. The four-valve arrangement, with its collection of lower-mass parts, was a natural choice.

And the Europeans looked on with great amusement. They had tried such a thing, before the war, even, and had found it wanting; two valves were equal or superior to four in terms of peak gas-flow, and to the European, BMEP-oriented way of thinking, the Japanese engineering was, well, quaint.

That quaint engineering won 18 manufacturer's titles in seven years, after which Honda retired from roadracing. In 1976, though, the firm returned to competition; European endurance racing, this time. And the new RCB-series racers employed the same four-valve line of thought that had served so well a decade before. Indeed, the first example utilized a DOHC four-valve top end, grafted onto a single-cam 750 motor. Following that came a 941cc version, an entity unto itself, with a 68mm bore and 64.8mm stroke, which produced more than 110 horsepower at its 9500-rpm redline. It was this engine, itself a lineal descendant of the GP roadracers, that sired the street-going 750cc and 900cc versions in 1979.



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Such strong family ties are obvious and intentional; both the RCB engines and the 750/900/1100 derivatives are products of Shoichiro Irimajiri, Honda's vice president of R&D, and the man responsible for the 250 and 297cc six-cylinder engines, the 23,000-rpm 50cc twin and the 125cc five-cylinder engine from the Sixties.

The 750/900/1100 powerplants share more than just strong family ties, though. Honda spokesmen say the three are virtually the same, and that, in fact, Irimajiri's original design was intended to accommodate the various displacements from the outset. Obviously, there are differences: The 1100 has larger pistons and carburetors, more-aggressive cam timing, stiffer clutch springs and a 1.4mm-wider fifth gear than the 900; the 750 has its own crank, pistons, valves, cams and combustion-chamber shape, among other things. All three engines have the same major dimensions, though—bore centers, valve angle, crankcase width and so on—as well as the same first four gear ratios, jackshaft-to-clutch ratio and, more importantly, the same heritage.

That heritage became a double-edged sword once Honda began using the CB750 and 900 engines as the bases for its racing efforts. Honda won five world titles in endurance racing; Superbike competition was another matter.

Superbike racing demands maximum power from an engine. To get that power, modern theory dictates a narrow valve-angle (less than 40 degrees) to obtain a compact combustion chamber, which allows a more rapid and complete burn of the fuel/air charge. And a four-valve execution requires highly oversquare bore/stroke dimensions as well. The 750/900 engines, however, with their nearly square bore/stroke measurements and 60-degree valve angle, have relatively deep combustion chambers, resulting in a less efficient use of the fuel/air charge. So, to make more power, Honda had to resort to more rpm—just as with the GP bikes of the Sixties. With the longish stroke (69mm), though, piston speed rose dangerously high and connecting-rod strength became the limiting factor. To offset *that*, Honda resorted to titanium con rods. But even such specialized development offered no real advantages, because modern valve springs permitted equally high rev limits for two-valve designs. It's ironic, then, to see that Honda's success in Superbike racing came in spite of the engine's heritage, rather than because of it.

Away from the racetrack's harsh realities, though, such ironies lose their meaning; order is restored. What remains, in the form of the 750/900/1100 engine family, is the embodiment of the same concepts that helped establish Honda's reputation as a world-class manufacturer. That those engines have been able to thrive in the Eighties is both a tribute to those concepts and a reaffirmation of them.

—Charles Everitt

to gauge how quickly the corner *isn't* rushing up at you to be able to tell. The kinesthetics are simply different. And while the brakes let you carry speed into a turn, you can exit hard as well, courtesy of the cleanest gear-changing any Honda F has offered. Previous models suffered from sloppy shifting, and botched gearchanges were part of the program. The 1100, with stiffer clutch springs and a redesigned clutch-release mechanism, shifts more positively than any of its ancestors.

As competent as the F is in other areas, though, it's engine performance that most potential riders will care about. As the descendant of a 750 pitted against a pair of awesomely competent fire-breathers like the the GS1100 and GPz1100, the F might seem outgunned from the outset. Nothing could be further from the white-knuckles truth. Throttle response on the Hyper-Honda is just about as linear as you'll find on any motorcycle. The power doesn't so much come on as simply *stay* on. No F, up to now, has had an abundance of low-end torque, but this one lays that tradition to rest. It's not quite as strong right off of idle as an '82-model GS1100, but once the F hits 3000 rpm or so it will pull dead-even with the Suzuki, until the GS runs out of steam at the top end. And side-to-side with an '82-model GPz, despite the red racer's sound and fury, the Honda quietly puts the motor on it; down low, in the midrange or up high. The F is so deceptively smooth and steady in its dash toward redline that it just doesn't seem exceptionally fast by hyperbike standards. It is—outrageously fast in fact—but the best clue to the F's real acceleration is the speedometer needle dashing toward the 150-mph side of the gauge.

Despite its background, the 1100F is a new motorcycle, changed from previous Fs by a host of refinements from one end to the other.

You might think that a motorcycle with performance credentials as impressive as the 1100's would have some dark side to it, some snappish, bizarre behavior that would keep it chained in your garage until you could gird your loins to face it. But if the F is hiding any such deep, dark personality quirks, we couldn't find them. After a hot session in the canyons, the F is supremely content to burble around town like a good citizen, or to launch off on a 500-mile sport-tour. The riding position is sufficiently roomy to haul rider and passenger around without forcing undue intimacy, and if it isn't quite right, adjust it. The three-piece handlebars go from Superbike-flat to a semi-pullback with nothing more than the Allen wrench in the toolkit, and at full-forward they offer a sport-touring delight: enough room to allow lock-to-lock clearance even with a large tankbag strapped in place.

Continued

Charting the Changes

Engine: 5.5mm bore increase (70mm vs. 64.5mm) jumped engine displacement to 1062cc. Intake cam lift increased .5mm; intake cam timing altered to open valves five degrees sooner. Exhaust cam lift increased 1mm; exhaust valves close five degrees later. Ignition-timing range same as on 900, but full retard is at 2000 rpm and full advance is at 3500 rpm (compared to 1700 rpm and 3100 rpm on 900). Compression ratio increased from 8.8:1 to 9.7:1. 1100F uses four 33mm Keihin constant-vacuum carburetors with single accelerator pump; 900F used 32mm Keihins. Fifth gear widened for strength. Transmission mainshaft heat-treatment altered for improved wear. Same internal gear ratios as 900, but 1100 rear sprocket has 42 teeth, two less than 900, for 2.471:1 final-drive ratio. Stiffer clutch springs used, as well as a redesigned clutch-release mechanism.

Suspension: Front fork allows three-way-adjustable rebound damping; recommended static air pressure reduced to 0-8 psi. Dual-rate fork springs stiffened slightly. Front wheel travel reduced 10mm. Steering head is 21mm longer and moved 10mm rearward; steering head angle increased one degree (28.5 vs. 27.5), and trail is increased 10mm. Rear shocks allow both rebound and compression damping adjustment without tools. Swingarm is now box-section and, like the 900's, rides on needle bearings.

Brakes: Mechanisms similar to previous twin-piston design, but brake pads are semi-metallic and chamfered to work with TRAC anti-dive system. Front fork incorporates dual TRAC units actuated by caliper torque-reaction.

Wheels: Rim diameter is now 18 inches in front, 17 inches in rear; rear wheel is one-half-inch wider. Wheels are cast alloy instead of ComStar compound-type.

Tires: V-rated Bridgestone Mag Mopus tires replace last year's Dunlop Gold Seal tires, also V-rated. Tire size is now 100/90-18 front, 130/90-17 rear; recommended tire pressure increased to 36 psi front, 41 psi rear.

Details: 1100F incorporates quarter-fairing and rectangular halogen headlamp. Eight-level oil cooler replaces 900's four-level unit. Redesigned front fender has integral aluminum fork brace. Speedometer displays up to 150 mph. Seat is cut down from 900's for sportier riding position. Three-piece handlebars allow independent adjustment of grip angle within a 13-degree range. Exhaust pipes unchanged, except finish is now black chrome.

COMPARATIVE TEST DATA:

Make and Model	Quarter-Mile, sec/mph	Top Speed, mph	Weight, lbs	Stopping Distance From 60 mph, ft.
Honda CB1100F–'83	11.22/119.8	144	550	135
Kawasaki GPz1100–'82	11.33/119.4	137	534	127
Suzuki GS1100E–'82	11.20/119.3	141	530	132
Honda CB900F–'81	12.21/111.1	141	547	130
Kawasaki GPz1100–'81	11.44/118.6	133	538	158
Suzuki GS1100E–'81	11.36/118.6	141	535	123

In fact, the F's road manners are so good that sport-tourers are likely to adopt it as their favorite son. The only vibration the F delivers is a non-numbing tingle that comes through the bars and pegs at about 4000 rpm, and just a touch more throttle gets rid of it. Set to full-soft, the front fork displays no apparent sliding friction, and the dual-rate fork springs and adjustable damping are capable of smothering any road-jolt, large or small. The rear end, similarly set to cruise-mode, does a good job as well but seems marginally stiffer than it needs to be. Since the Showa shocks' spring and damping rates are identical to those of the 900F, which handled the Superslab with just a bit more cushion, the small difference in ride quality can be traced to the 1100's seat, shaved slightly to cater to more-sporting tastes. Even so, the F handles freeways so adroitly that you just might figure the best set of twisties to wring it out on are in the next state over . . . or just maybe the one after that.

Nonetheless, to some absolutists among us, the jury is still out. The F's wide-band, balanced performance is at least competitive with, if not better than, what the '82 hyperbikes offered. But rumor has it that the '83 competition will be stronger, faster, lighter. And since we haven't tested them all, we can't yet say how the Honda will fare in absolute terms. But, this much is certain: At $3698, the CB1100F offers a significant price advantage over its '83 competition—$500 over the GS1100 Suzuki and a whopping $800 over the new GPz1100. You might be tempted to call the CB1100F the performance value of the year. In fact, please do. But pricetag or not, the Honda is a brilliantly conceived and executed motorcycle, capable of outperforming most of the riders who will ever be lucky enough to swing a leg over one.

Breeding will tell. ●

In executing the 1100, Honda relied on an economy of gimmicks. As a result, the F is, more than anything else, a rider's motorcycle.

CB1100F's running gear—wheels, suspension, steering head angle—is new for '83

But it's still the same, old F-style cornering: superb.

Ride Review

• If the CB1100F is any indication, there's a lot of life left in the transverse vertical four-cylinder engine. That's a topic of much discussion lately, what with all of the vee-type motors that have been cropping up, especially in Honda's own '83 lineup. The implication is that the inline four's days are numbered, including the 1100F's, which has been kicking around in 750cc and 900cc incarnations since first introduced in late 1978.

Impending obsolescence or not, however, one ride on an 1100F is enough to send most people scurrying for their wallets. It's ethereally smooth, extremely refined and blindingly fast. And while it's not, admittedly, quite wonderful enough to supplant the GS1100 Suzuki as my all-time-favorite hyperbike, it comes a lot closer than I thought any four-year-old, bored-and-stroked CB750 ever could.

—Paul Dean

• To my way of thinking, liter-size and larger motorcycles are rolling exercises in excess: They just have too much weight, too much bulk and too much power. Given the choice, I'd almost always pick the more balanced approach inherent in a middleweight motorcycle over the wretched excess of 1000s and 1100s.

But the key word is balance, and it's a word that loomed large in the development of the CB1100F. This hyperbike doesn't try to overwhelm the rider with its weight and size. The 1100 *feels* light and nimble, and that's a quality that can be as valuable as actually *being* light. Plus, the F exudes a refined, silky civility that is absent in, say, a GPz1100. With all that seductive power, though, an F-pilot might as well *give* the DMV his license and save everyone the trouble later. But considering the CB110F's other virtues, I guess I could live with that. *—Charles Everitt*

• Maybe I've just reached the wonderbike saturation-point, but if Japan launches another transverse-four-cylinder, ultra-smooth, 11-second technomarvel I think I'll throw a valve. The CB1100F is too much of the same thing. Sure it goes fast, but that's already been done. And sure it's smooth, quiet and good-handling, but for performance I'll still take a GS or a GPz. The truth is that for my investment, there's nothing on this machine that makes it more than a me-too effort.

I know, it's inexpensive compared to the liter-plus machines from Kawasaki and Suzuki. But half the fun in being able to blow the paint off anything on the road is when everyone *knows* you can blow the paint off anything on the road. The CB, though, looks like no more than flashy paint on a '79 CB750F. No thanks. For me, the Honda is too dull and too late—even if it doesn't cost too much. *—Ron Lawson*

CYCLE GUIDE SPECIFICATIONS

Honda CB1100F — street

IMPORTER: American Honda Motor Company Inc., 100 West Alondra Boulevard, Gardena, California 90247

SUGGESTED RETAIL PRICE: $3698

ENGINE

Type ..... four-stroke transverse vertical four
Valve arrangement ..... double overhead camshafts, four valves per cylinder
Bore and stroke ..... 70.0mm x 69.0mm
Displacement 1062.2cc
Compression ratio 9.7:1
Engine redline ..... 9500 rpm
Carburetion ..... four 33mm Keihin constant-vacuum, one accelerator pump
Air filter ..... disposable paper element
Lubrication ..... wet sump
Starting system ..... electric only
Ignition ..... transistorized breakerless
Charging system ..... 12-volt; 260-watt alternator, voltage regulator/rectifier, 14-ampere-hour battery

DRIVETRAIN

Clutch ..... wet, multi-plate
Crankshaft-to-jackshaft drive ..... Hy-Vo-type chain; 1.000:1 ratio
Jackshaft-to-transmission drive ..... straight-cut gears; 2.041:1 ratio
Final drive ..... #530 O-ring chain (5/8-in. pitch, 3/8-in. width); 2.471:1 (42/17) ratio

Gear	Internal gear ratio	Overall gear ratio	MPH per 1000 RPM
I	2.533	12.775	6.00
II	1.789	9.022	8.49
III	1.391	7.015	10.92
IV	1.160	5.850	13.10
V	1.000	5.043	15.19

SUSPENSION/WHEEL TRAVEL

Front ..... Showa air-spring, 39mm stanchion tube diameter, 3-way adjustable rebound damping, brake-actuated hydraulic anti-dive/6.1 in. (154mm)
Rear ..... dual Showa shocks, 5-way adjustable spring preload, 2-way adjustable compression damping, 3-way adjustable rebound damping/4.1 in. (104mm)

BRAKES

Front ..... dual single-action hydraulic calipers, 10.9-in. (276mm) discs
Rear ..... single-action hydraulic caliper, 11.7-in. (298mm) disc

TIRES

Front ..... 100/90V18 Bridgestone Mag Mopus L303 tubeless
Rear ..... 130/90V17 Bridgestone Mag Mopus G508 tubeless

DIMENSIONS AND CAPACITIES

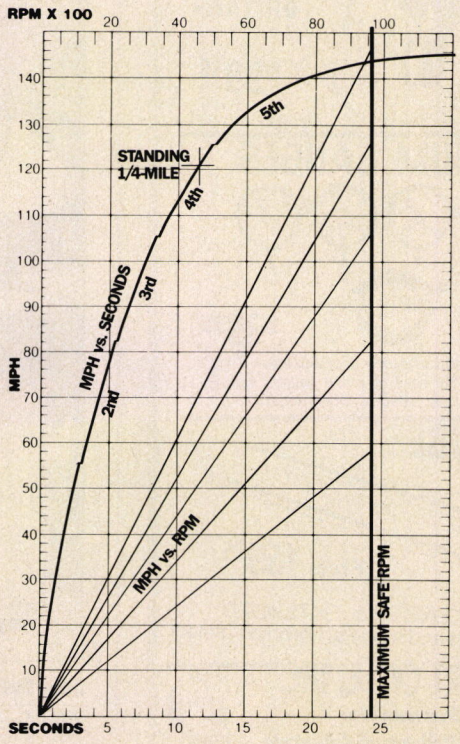
Weight ..... 550 lbs. (249.4kg)
Weight distribution ..... 47.2% front, 52.8% rear
Gross vehicle weight rating (GVWR) ..... 950 lbs. (431kg)
Load capacity (with full fuel tank) ..... 368 lbs. (167kg)
Wheelbase ..... 59.5 to 60.7 in. (1512 to 1543mm)
Seat height ..... 32.2 in. (818mm)
Handlebar width ..... 28.7 in. (730mm)
Footpeg height ..... 13.8 in. (350mm)
Ground clearance ... 6.5 in. (166mm), at exhaust headers
Steering head angle ..... 28.5 degrees from vertical
Front wheel trail ..... 4.72 in. (120mm)
Frame ..... tubular mild steel, double front downtubes
Oil capacity ..... 4.7 qt. (4.5*l*)
Fuel tank ..... steel, 5.3 gal. (20*l*), including 0.9 gal. (3.5*l*) reserve
Instrumentation ..... speedometer, odometer, tripmeter resettable to zero, tachometer

PERFORMANCE

Fuel consumption ..... 33 to 46 mpg (14 to 20 km/*l*)
Average fuel consumption ..... 39 mpg (17 km/*l*)
Cruising range, maximum ..... 175 to 244 miles (282 to 393km)
Cruising range, reserve only .. 30 to 41 miles (48 to 66km)
Speedometer error, 30 mph indicated ..... 30 mph actual
Speedometer error, 55 mph indicated ..... 52 mph actual
Best 1/4-mile acceleration ..... 11.224 sec., 119.84 mph (193 km/h)
Top speed (calculated at redline) ... 144 mph (232 km/h)
Stopping distance from 30 mph ..... 33 ft. (10.1m)
Stopping distance from 60 mph ..... 135 ft. (41.1m)

WARRANTY: 12 months unlimited mileage

AVAILABLE COLORS: red and white; blue and white



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PRODUCT EVALUATION:

Gold Belt Line DeMudder

Brushing those between-moto cavities.

• Motocross is a filthy sport. Anyone who's ever raced, watched or had to clean up after it will agree: Dirt finds its way into everything. But worse yet is the residue of a moto spent on a muddy track: that almost omnipresent sludge. Aside from looking horrendous, it is neither easy to remove, nor a wanted accessory on a motocross bike.

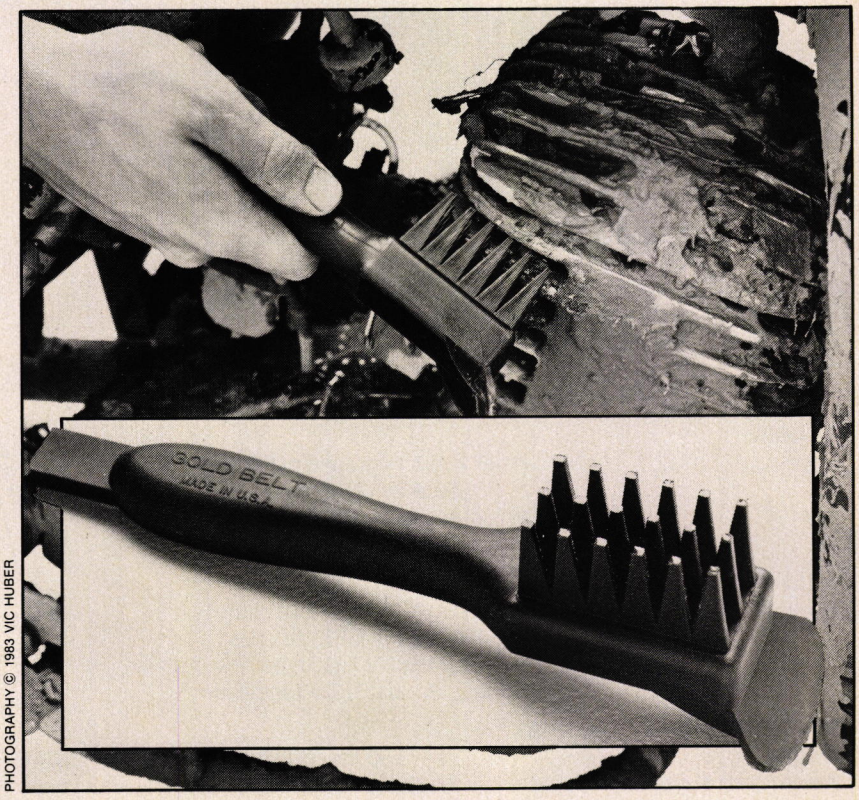
Gold Belt Line is trying to change that, at least the part about cleanup, with its DeMudder. No "thousand magic attachments" here, just a plastic brush/scraper designed to clean cylinder fins, rims, fenders and any other goo-gathering area a motocrosser has.

And what it's designed to do, it does well. The cylinder-fin brush scrapes the gunk from two to three fins per pass, making trackside cooling-fin cleanup much easier. And the duckbill-shaped rim-scraper on the DeMudder's handle works equally well, DeMudding wheels and fenders in seconds. The knob-scraper, located at the other end of the DeMudder from the brush/duckbill, is shaped to facilitate the removal of mud from between the tire's knobs, and this sharp-edged portion also can be used in conjunction with the fin-scraper to clear mud from around the countershaft.

There is one catch, however. For best results, the DeMudder must be used on fresh, gooey mud. Due to the tool's soft compound (which allows the brush to be flexible), dried-on dirt rapidly will wear away the device's sharp edges. But used at the track on fresh mud, the DeMudder should last several seasons.

In short, the DeMudder works. A longer rim-scraper and maybe a harder-compound duckbill would improve things, but for $6.95 this tool makes a handy addition to any race kit. There are those who'll debate the value of such a tool, but let them keep their screwdrivers and dowels; the DeMudder undoubtedly is the easy way out of a dirty situation.

The DeMudder is available through local Gold Belt dealers or directly from Gold Belt Line Inc., 7045 Darby Avenue, Reseda, California 91335. —*Marc Cook*



PHOTOGRAPHY © 1983 VIC HUBER

Gold Belt Line's single-handed weight-and-mud loss program

The DeMudder will give you a motocrosser to be proud of.

GUIDE LINES

Cycle Guide's Monthly Chronicle of Scoops, Tips, Rumors and Hard Facts

BY JOE KRESS

COMING SOON

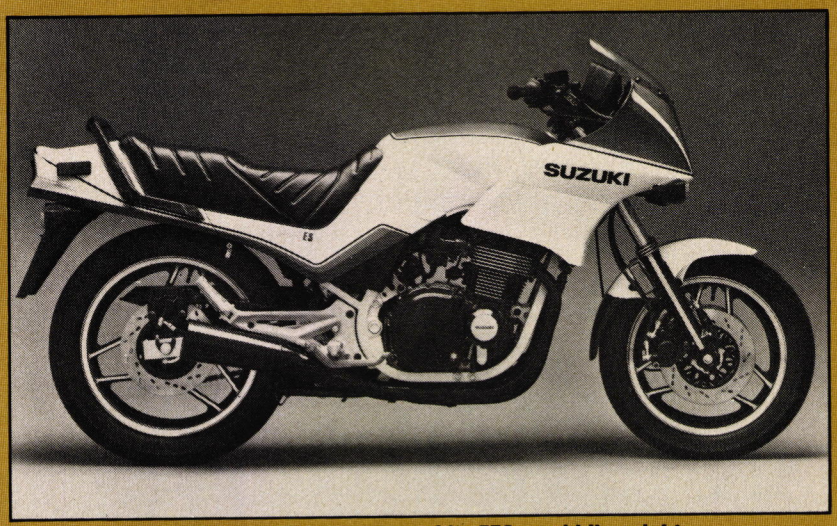
• At its new-model introduction in Reno, Suzuki pulled the sheets off the company's 49 newest models. With that many machines on display there was plenty to turn heads, but one bike brought the house down. The new GS550ES had everyone on their feet and slack-jawed, and not without reason. For 1983, the 550ES is a totally new middleweight, redesigned from page-one with maximum performance and minimum weight as the twin goals. This year the 550 finally has a new 16-valve, TSCC engine with a 572cc displacement and a 10.0:1 compression ratio. And that's just the beginning; add to that a box-section-tube frame with Full Floater rear suspension, an air-assisted anti-dive fork with a 16-inch front wheel and a frame-mounted half-fairing and you begin to understand the excitement. For '83, this 416-pound machine has the promise of being a legitimate sports-rocket. And if the ES model doesn't suit you, there's the plain E-version; mechanically the same bike, but with a quarter-fairing in place of the ES's half-fairing.

• The same sport-think carries over to Suzuki's three-quarter-liter machines, too. This year the 750s not only have more power from all-new 16-valve engines, but the TSCC powerplants are mounted in new, square-tube frames, similar to the 550's. And like their smaller stablemates, the sport 750s also are offered in either E or ES trim, this year with Full Floater rear suspension, complete with remote damping adjustment and a hydraulically actuated remote preload adjuster. The 750s also have 16-inch front wheels, air-assisted forks and claimed dry weights of 455 pounds for the E-version and 460 pounds for the ES.

• And for advocates of puffer power, the XN85 Turbo is in the Suzuki lineup for '83. This is the machine you read about in the July issue of CG, and the for-sale version is mostly unchanged from the prototype we told you about then. On the XN85, equal emphasis was placed on handling and making horsepower with the Twin Dome 673cc engine. Evidence of this is the Full Floater rear suspension with remote preload-adjustment, the 16-inch front wheel and the fork, which has anti-dive and preload adjustment. Suzuki's turbobike is a no-frills sport package that just happens to include forced induction, and at a dry weight of 506 pounds it should deliver.

• For a more traditional machine, Suzuki now has the GR650 Tempter, a 1983-style vertical twin. Two models are available: the GR650 and the GR650X, an even more traditional bike rolling on wire-spoked aluminum alloy wheels. But while both these machines might outwardly appear simple and straightforward, technically they're state-of-the-art, including such features as a variable-mass crankshaft (an auxiliary flywheel that engages and disengages centrifugally), a new-design air-induction system for the Twin Dome head and extensive weight-saving engineering, including the use of hollow camshafts, racebike-style. And both of these 650 twins are extremely light for their displacement size, checking in at 396 and 393 pounds, respectively. That weight, combined with the low seat height of 29.9 inches, should make the GRs equally appealing to new riders and to old-time fans of 650-twin performance.

• The Katanas, of course, are back for '83; this year's lineup includes no less than three versions of the Muth-inspired design. By displacement, the smallest '83 Katana is the GS650M, a shaft-drive bike with the 673cc Twin Dome en-



After a six-year wait Suzuki has revamped its 550cc middleweight

Completely rebuilt is more like it—engine, chassis and bodywork are new.

If it's tradition you want Suzuki's 650cc vertical twin can supply it

But there's nothing old fashioned here—the technology is pure 1980s.

Continued

WHEN YOU ABSOL
HAVE TO BE THE

Performance, technology and reliability. If you're looking for a bike that delivers all three you can stop looking. And start riding the 1983 V45 Sabre.™

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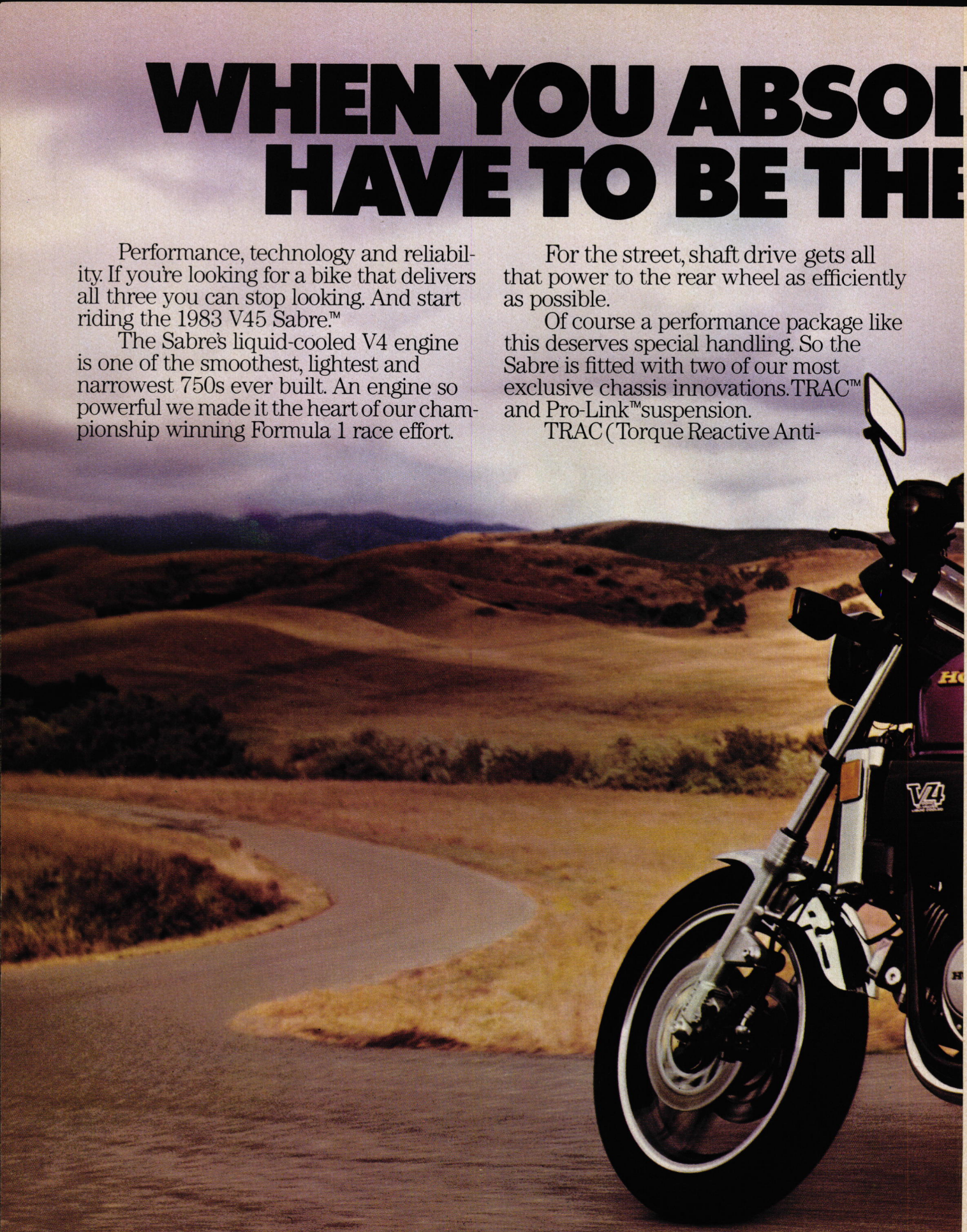

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dive Control) helps reduce forward weight transfer during braking. And because it's mechanically activated it does so without affecting the feel of the brakes.

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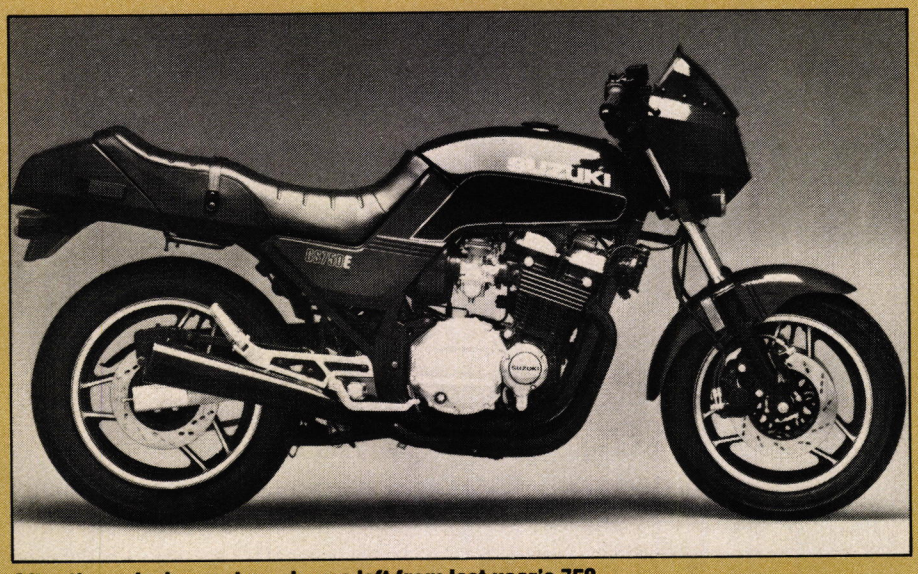
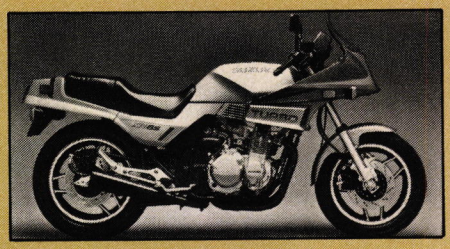


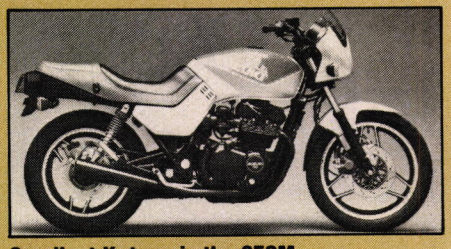
After the redesign, not much was left from last year's 750

And a scale will tell you as much—this one weighs only 455 pounds.



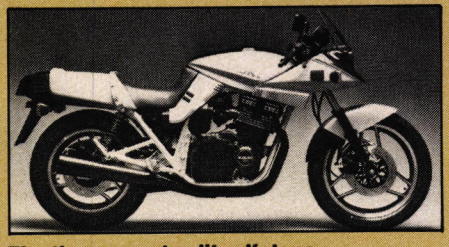
Suzuki's turbo approach is all its own

No frills—just the goods.



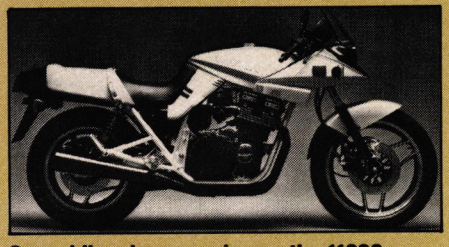
Smallest Katana is the 650M

Last year for Europe; this year for us.



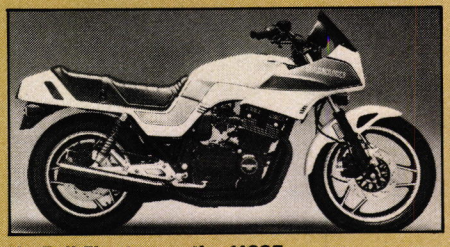
The three-quarter-liter Katana

For those who prefer clip-ons.



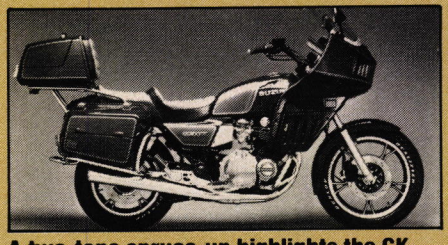
Superbike changes give us the 1100S

There's no cc-limit on the street.



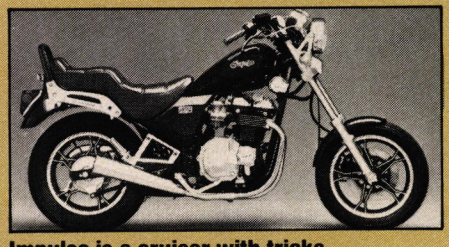
No Full Floater on the 1100E

It gets the black-out look instead.



A two-tone spruce-up highlights the GK

It's turn-key touring, Suzuki style.



Impulse is a cruiser with tricks

Hexagonal-tube frame is one of them.

Only a few changes on the RM250

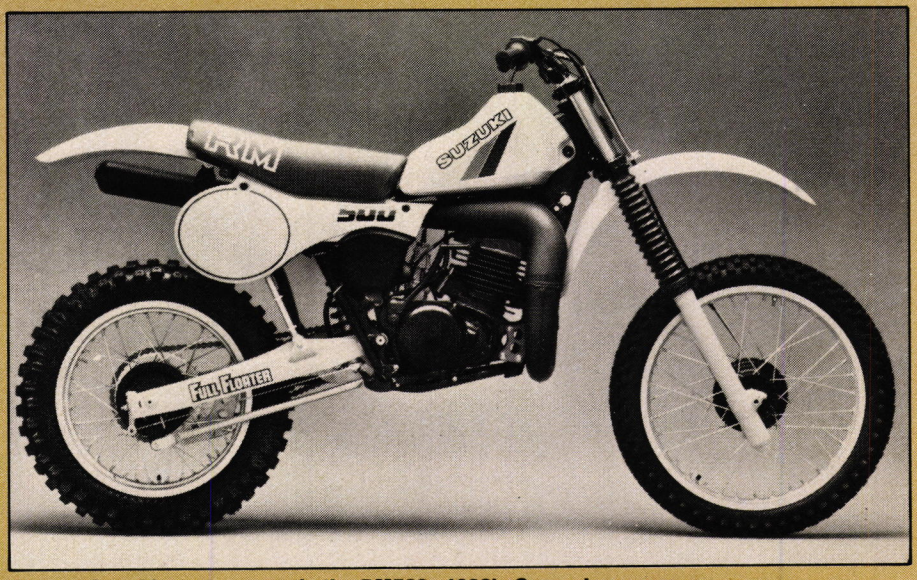
Like more power and less weight.

Suzuki's new idea for ATV

All it took was one more wheel.

The pint-sized 50cc Trail Buddy

Hide this picture from your kids.



Newest Suzuki motocrosser is the RM500—1983's Open class weapon

Proof-positive that Suzuki isn't giving away any races.

gine. Next up the displacement scale is the GS750S, the three-quarter-liter Katana that, like the 650M, we didn't see here in the U.S. last year. The 750S is the familiar chain-drive Katana with the 16-valve TSCC engine. The bike has many of the features offered on last year's 1000S and includes some new ones, like its Turbo-style wheels. The third Katana in the 1983 lineup is the replacement for '82's 1000S. Now that the AMA Superbike class is limited to 750cc machines, the 1000cc engine was dropped and this year the top-displacement Katana is the machine the rest of the world had last year: the GS1100S. It, too, has all the features of the '82 bike, including an anti-dive fork, preload-adjustable suspension both front and rear, and forged-aluminum clip-on handlebars.

• And as if it really needed it, the GS1100E, the quickest production motorcycle of 1982, has undergone a few engine changes claimed to make it even quicker for '83. The bike has a new look this year, too: The engine, carburetors and exhaust system now have the black-out treatment. And like all sport-model Suzukis this year, the 1100 is offered both in E and ES trim.

• The GS1100GK, of course, comes with a little more than a half-fairing as standard equipment. This year, Suzuki's turn-key tourer returns with a new two-tone light- and dark-brown paint and upholstery treatment, capped off with gold accent striping. Underneath the cosmetics, though, this year's GK is mechanically the same as the '82 version; it's the eight-valve, DOHC 1100G with Suzuki's own saddlebags, trunk and fairing mounted.

• The full line of Suzuki cruisers is back for '83, as well, and while the majority of them have only minor changes from last year, one L-model, the 550 Impulse, is an all-new bike. In concept and execution, this middleweight cruiser is like nothing ever before offered from Suzuki. Instead of just draping a custom-style tank and pullback bar over a standard-model bike, the Impulse was planned from the start as a cruiser. Its 16-valve TSCC engine is mounted in a custom hexagonal-section-tube frame and, due in part to the use of 16-inch wheels both front and rear, the seat height is a low 29.3 inches. With its teardrop tank, chopped-megaphone exhaust, forged-aluminum handlebars and short, polished grabrail, the 550 Impulse will turn more than a few heads out on Thunder Road.

• But these days a lot of the action isn't on Thunder Road, it's out in Sandwash Gulch with ATVs, and Suzuki is after these riders with a new lineup of three- and four-wheelers. The LT125 4x6 is something brand-new to this market; a balloon-tired four-wheeler with six speeds: five forward and one *reverse*. More conventional, however, is the new ALT125 3x6, the same four-stroke engine and transmission package as used in the four-wheeler, but this time with one less wheel. Suzuki's third ATV entry is the one most likely to be parked under a Christmas tree or found with Happy Birthday ribbons tied to it: the 50cc ALT50 Trail Buddy. This miniaturized three-wheeler with automatic single-speed transmission, light weight and easy-to-use controls is aimed right at the young, budding off-roader. And the long leash-like tether on the kill

Continued

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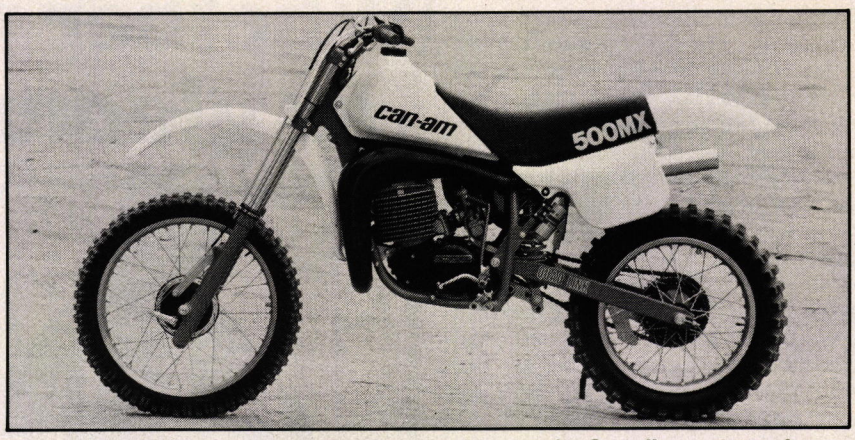
RIDE/REPORT:

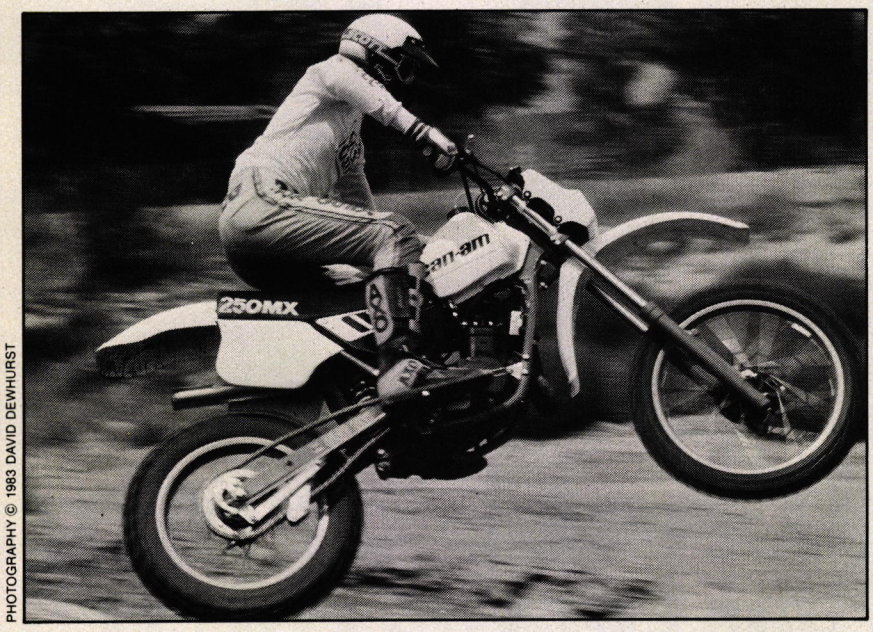
Can-Am 250MX/500MX

Bombardier jacks up the Can-Am logo and rides a whole new bike—and a half-new organization—under it.



Liquid-cooled 250 and air-cooled 500 mark a new era for Canadian motorcycles

For one thing, they come together from everywhere in the world but *Canada.*



PHOTOGRAPHY © 1983 DAVID DEWHURST

• If you've heard rumors that Can-Am motorcycles have passed on to that great bermshoot in the sky, forget them. Not only is the marque still alive and kicking, but based on our brief riding encounter with two 1983 prototypes—the all-new, air-cooled 500MX and the mostly new, liquid-cooled 250MX—the latest generation of Can-Ams could turn out to be the most competitive in the brand's 10-year existence.

Apparently, those erroneous rumors about the demise of Can-Am were precipitated by a recent reorganization within the Motorcycle Division of Bombardier Inc. That huge Canadian manufacturing firm still is Can-Am's parent company, but all of the motorcycle-related R&D operations have been moved from Bombardier's corporate headquarters in Valcourt, Quebec, to its Rotax engine subsidiary in Austria. In addition, the design and manufacture of Can-Am chassis, as well as responsibility for the assembly of the finished products, has been contracted to Armstrong Competition Motorcycles in England.

A peculiar arrangement, to be sure. But what matters is not how or where the bikes are built but how they perform. And in that respect, the two motorcycles we rode were mighty impressive. The Quad Link rear suspension (similar to Honda's Pro-Link but using a single Ohlins damping-adjustable shock) and Marzocchi front fork on both machines seemed able to absorb nicely the punishment of motocross, and the chassis geometry delivered some of the quickest, most precise steering we've experienced in a long time. And although the tentative specifications for both bikes indicate that each is 10 to 15 pounds heavier than its top competitors, neither one *felt* heavy. Both were relatively easy to flick back and forth or lay over and slam into a tall berm.

Actually, most of the chassis components on these two bikes were production-line items, so our evaluation of their performance should carry through to the machines that show up in the dealerships. But the liquid-cooled top end on the 250MX still was in the late stages of development by Rotax; and the 500MX's entire engine was an out-and-out prototype—so much so that the gearbox in its sand-cast engine cases was a five-speed identical to the one used in the Sonic MX, a four-stroke, 500cc thumper featured in a full test elsewhere in this issue. The final 500MX production bike will have a four-speed box with ratios better-suited to the 483cc two-stroke's power output.

Mismatched gear ratios or not, the 500MX was a pretty thrilling ride. It seemed fully capable of unleashing as much rock-roosting, white-knuckle acceleration as anything on the track, 495 KTMs and 500CR Huskys included. Probably due to its relatively light flywheels, the quick-revving 500MX wasn't a brute torquer like a 490 Maico, but neither was it a high-rpm screamer along the lines of the Honda CR480R. But in between those two extremes, the Can-Am churned out enough midrange to be competitive in any Open-class motocross. And if Rotax succeeds in finding a bit more power either on the bottom or the top, the 500MX could become the hottest Open-classer in production.

On the other hand, the engine in the 250MX already is highly competitive. In addition to owning the kind of impressive peak horsepower that Rotax-built, rotary-valve 250s are noted for, the prototype also had the widest, most tractable powerband of any 250-class Can-Am MXer in memory. Like the 500, it, too, was a quick revver, but the power delivery was smooth and linear, with no peakiness anywhere in the rpm range. And that was quite a contrast to the pipey, explosive behavior that has typified 250cc Can-Am engines in years past.

Overall, in fact, there's damned little about these new Can-Ams that is even vaguely similar to the old ones, whether in design, development, performance, appearance or place of manufacture. Come to think of it, considering who's building the new bikes, perhaps Bombardier even ought to consider changing the name of the motorcycles . . . like from Can-Am to Can-*Arm*.

—Paul Dean

switch allows Pop to quickly pull the plug on the aspiring racer whenever he gets in over his head.

• Not all off-roading is for fun and games, though; there's the serious side of motocross, and the '83 RMs haven't been neglected. With added power, improved suspension and lighter weight, both the RM125 and 250 should be up to the job for the new season. But Suzuki's big news is in the Open class this year, with the introduction of the RM500. Last year's 465 is now a 492, but that's far from the only change made to the bike; a new shock, redesigned Full Floater struts, revised steering geometry and an overall weight loss are just a few of the improvements on a machine Suzuki hopes will be an as-delivered Open-class winner.

Last month we showed you what's new at Honda, and sneaked in a few Yamahas, as well. Next month we'll be looking at a few more '83s from those two companies, and a complete roundup of the 1983 Kawasakis.

HARD CASH

• BMW is leasing motorcycles—or will be shortly. The company's retail leasing program, a first for the motorcycle industry, will be run by BMW in conjunction with General Electric Credit. Dealers will begin leasing motorcycles, on both 24- and 36-month plans, in a few selected areas of the country with the program eventually going nationwide. The exact details of the motorcycle leasing plan haven't been fully worked out yet, but both BMW and GE Credit claim the finalized plan will be tailored to the motorcyclist—with payments low enough to allow a prospective rider to move up to a machine he normally could not afford.

• And if the new leasing program isn't enough to swing the sale of a BMW, that company's 36-month, unlimited-mileage warranty might. In another industry first, BMW's extended-coverage warranty applies not only to new, 1983 models but is retroactive to include all BMWs sold during 1982, as well.

• The numbers are in for annual motorcycle sales per state and, not surprisingly, California tops the list, accounting for 12 percent of the national sales total. Right behind California, though, is Texas, followed by New York, Illinois and Michigan. Ohio is in the number six position, with Pennsylvania, Florida, Wisconsin and Minnesota rounding out the top ten.

• If you're looking for the "long deal" on a new bike, pay attention here. Despite a 21 percent decrease in new-bike registrations through May of '82, total imports of Japanese motorcycles were *up* 7 percent for that same period compared to the 1982 numbers. With those kinds of figures choking warehouse inventories, the time never has been better to strike a bargain on the showroom floor.

• If Honda has correctly read its market, you might be seeing the nicest people on a scooter. Until last year, sales of Honda motor scooters were limited to Japan only, but their sales success in the English market during 1982 was enough to make Honda think seriously about

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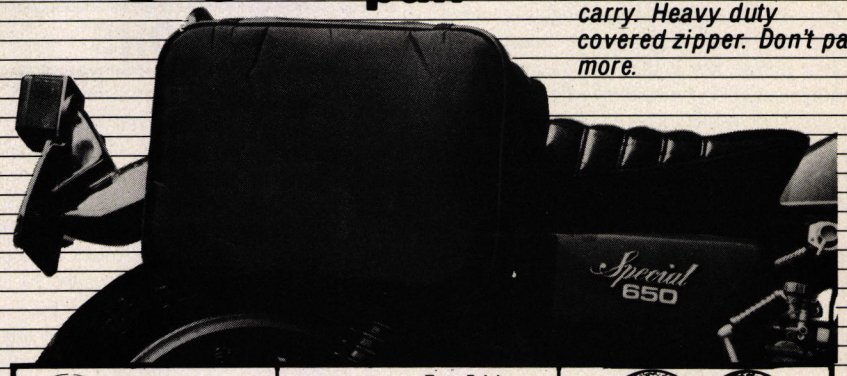

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bringing scooters into the U.S.

• If you're still laboring under the illusion that Harley-Davidson is a man's machine, and members of the opposite sex need not apply for ownership—think again. Though it might be the last bastion of male chauvinism, the ranks of the Harley faithful are under siege; out of every 100 new H-Ds sold, three are bought by women.

• The 1982 "Biker's Fight Against Muscular Dystrophy" is over, and in the three years since the fund-raising effort was started almost three-quarters of a million dollars have been donated to the charity. This year's total—$230,000—was presented to MDA national chairman Jerry Lewis during the association's Labor Day telethon. In presenting the check, Harley-Davidson Vice President of Marketing, Dave Caruso, explained where the money actually came from: thousands of motorcyclists participating in hundreds of events throughout the country. H-D, he said, was just the catalyst.

FEDERAL CASES

• Pennsylvania is considering adopting a law which has all the spirit of Nathanial Hawthorne and the Scarlet Letter. SB1561 proposes that motorists convicted of driving under the influence be issued special license plates, thereby marking them as transgressors. Standard colors for Pennsylvania plates are yellow with dark-blue letters; convicted offenders would get red plates with yellow letters, the same colors that Hester Prine was forced to wear.

• Quite often something seems so obvious that no one ever bothers to check its validity, and when a study finally is made, the original premise is found to be riddled with holes. A case in point is the daytime headlight-on law for motorcycles, a statute currently on the books of 17 states. The Motorcycle Safety Foundation recently contracted Penn State University to conduct a nationwide survey of all available data concerning the headlight-on laws, and the study concluded that there were no significant merits to the headlight law. Nor, for that matter, were there any benefits found for laws requiring reflectorized helmets. In some cases these laws have been in effect for 15 years and, prior to Penn State's work, the only other study was done by the state of North Carolina. That test was inconclusive.

• Although North Carolina might not have found much usable information from its headlight-on study, that certainly wasn't the case with the state's motorcycle-emission research. The North Carolina state legislature has voted to *exempt* motorcycles from having to take an exhaust-emission test during registration.

• The use of radar detectors no longer is illegal in Michigan. A recent Supreme Court decision in that state has overturned a 1929 statute that state troopers had cited as grounds for confiscating detectors. The 54-year-old law prohibited listening in on "police radio" bands; the troopers were loosely interpreting that to include radar. The Supreme Court didn't agree.

• New Jersey is the latest state to propose legislation against the use of stereophonic headphones while operating a motor vehicle. New Jersey's bill, AB 1750, goes one step further, however, and would also ban headphone use by *pedestrians*—if they're on public roads. Punishment would be the same—whether on foot or on wheels: $75 for a first offense and $100 thereafter.

RUMORS

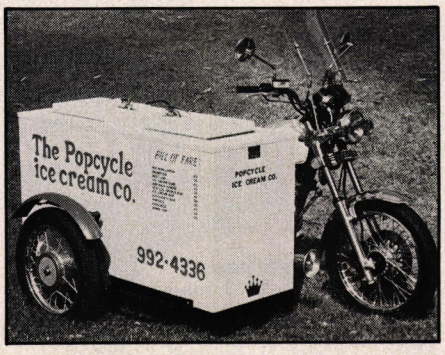
• With '83's model presentations over, you might think all that's new is out. You *might* think that—but you'd be wrong; like good poker players everywhere, motorcycle manufacturers don't always show everything they're holding. And we've been hearing from our usually reliable contacts that Honda just might have a few more aces left to play out. Now, we all know about the new vee-twins, both the 52-degree and the 45-degree versions. But those engines are liquid-cooled; our European connection warns us not to be too surprised if an air-cooled model shows up, based on the 750cc, 45-degree engine. And air-cooling might not be the only difference, hints our man on the Continent. He mentioned something about dry-sump lubrication.

• And he wasn't through yet. Still talking about Honda, our man told us to get ready for "automatic torque-amplification chambers" on some of the smaller two-stroke bikes' engines. He described the possible system as a rotary boss which varies the size of the exhaust port according to engine speed. Sound anything like a Yamaha Power Valve?

• From the other side of the globe our industry watchers in Japan are coming up with more of the same kind of thing: un-released models from Honda. The whispered words concerned more CBXs, with our Japanese man alluding to an addition to the 400cc and 550cc lineup. The newest CBX, we're told, is still undergoing testing, but our tout believes a midsummer release is entirely possible. The size of this latest bike? Six-fifty, he says, based on the Nighthawk engine.

APART FROM THE CROWD

• Remember those Good Humor ice cream trucks that used to show up in the neighborhood—just in time to cool off a hot summer afternoon? Well, the reason you haven't seen them lately is because the trucks disappeared from the streets in 1979, victims of rising operating costs. Hold on, though, because if Robert Kowalski—and his Popcycle Ice Cream Co. of Fullerton, California—is successful, that familiar jingle of the ice cream man's bell might once again break the heat of an August afternoon. Kowalski has fitted sidecar-mounted ice cream cabinets to Suzuki 250cc and 400cc bikes, claiming that 20 pounds of dry ice in the box will keep 60-dozen ice cream goodies frozen all day long. If you're interested in a new business, contact Kowalski at 124 W. Valencia Mesa #4, Fullerton, California 92635. Uh, I'll have a chocolate crunch bar when you're ready.



Good-humored delivery bike

Hey, mister! Gimme a drumstick!

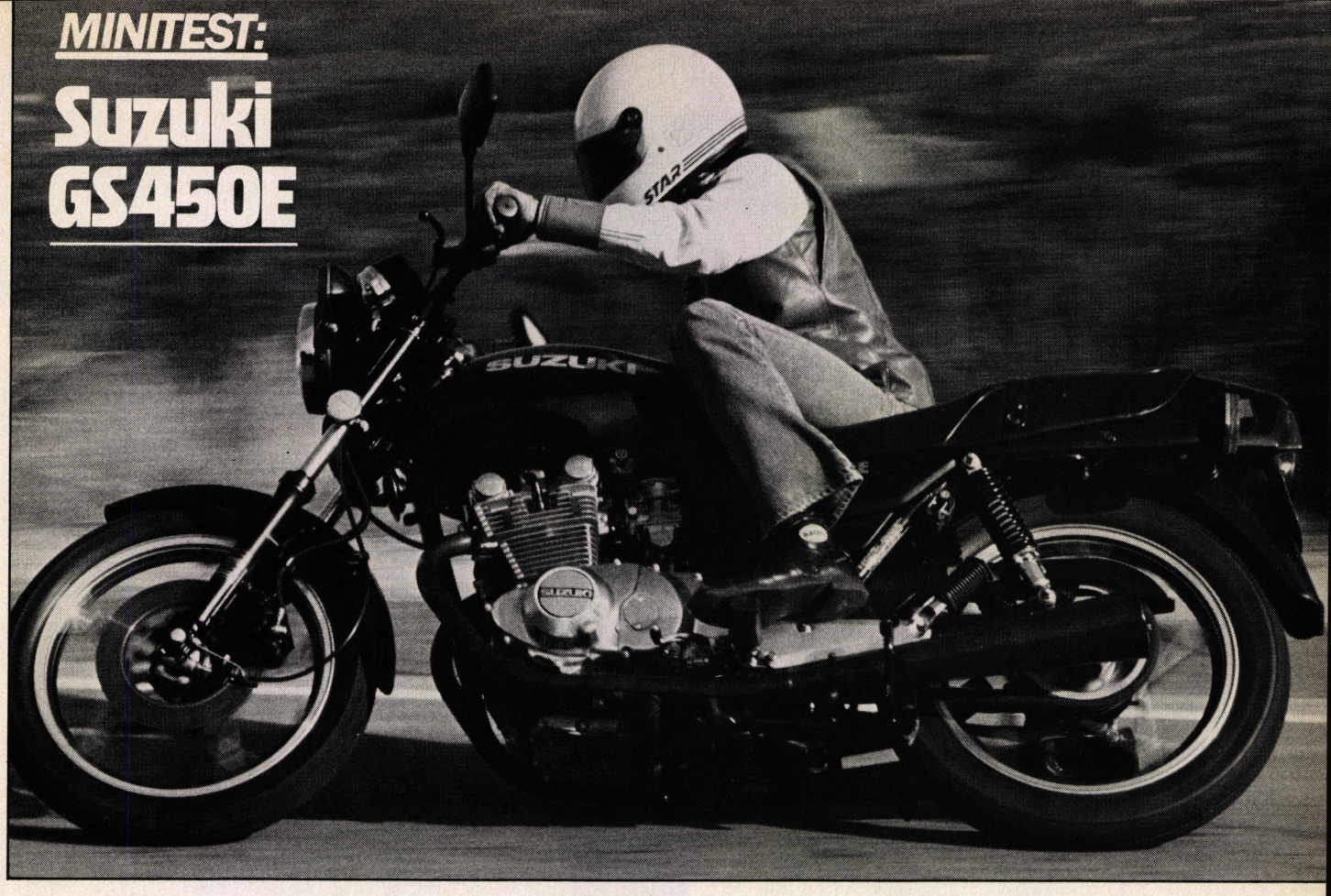
• All right, so maybe you're not ready to go into the ice cream business just yet—but what about Quasar manufacturing? You remember Quasars, that cross between a motorcycle, a car and, well . . . England. The Romarsh Company of Wiltshire, England, which had been making the automotive-engined cycle-oddity under license, has decided to abandon the project. Wilson's Engineering, the original developer of the Quasar, has no desire to take back production—however, it will grant a license to anyone interested in building the cage-framed curiosity. For a fee, of course.

• Okay, you've all heard of the Cannonball Baker Sea To Shining Sea Memorial Trophy Dash, and if you haven't, you've undoubtedly heard of Burt Reynolds and his movie "Cannonball," loosely based on the real thing. Ever wonder what the real-life times of the winners are? Well, George Egloff of Stewartsville, New Jersey, riding in the U.S. Express cross-country rally, set a new solo record of 49 hours 58 minutes for the distance between the Freeport, Long Island start and the San Francisco finish. Egloff did the 3,061 miles on his Dunlop-tired CBX at an average 60 mph. His only stops were for gas—and one short cat-nap.

• Transcontinental Egloff should be glad that he didn't contract motorcyclist's pneumomediastinum. Motorcyclist's *what*, you say? The condition, described in the New England Journal of Medicine, results from wind being blown into a rider's mouth during high-speed runs. The ram-air effect can severely damage tissue, the Journal notes, and can even enter into the chest cavity outside the lungs. And you thought bugs were your only problem.

• Bugs, nothing—you have to worry about bears, as well. And we're not talking about cops here. It seems that a motorcyclist in Russia had parked by the side of the road to take a little break when a huge brown bear came wandering out of the woods to check out the action. Apparently, this bear was in the market for a new bike of his own; he circled the machine a few times sniffing it out, then proceeded with the time-honored test of tire-kicking. Next up, of course, was trying the machine on for size, but it seems the riding position wasn't up to his standards. Dissatisfied with the ergonomics, the animal knocked the bike over and mauled it into an unrecognizable mass. The owner? He just stood by and watched—who's going to argue with an opinion backed up with 800 pounds of muscle? ●

MINITEST: Suzuki GS450E



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• Familiarity breeds acceptance. At least, that's what a manufacturer is counting on when it configures a motorcycle in the image of an existing, successful and usually more expensive one. The original's desirable qualities are then expected to rub off on the lesser model, thereby triggering the buyer's hand-to-wallet reflex. Similar forms suggest similar performance.

So it is with the GS450E. For 1983, Suzuki has endowed its middleweight twin with what sales brochures call Katana-like styling. Actually, the look owes more to Suzuki's GS1100E than to the Katana, but either role-model carries with it associations of high performance. Whatever its parentage, our 450E's appearance drew nothing but compliments. As an added effect, the styling treatment results in a lower seat height, a boon to those short of inseam or experience.

Further refinements for 1983 include black-chrome exhausts, a quartz-halogen headlight, a fuel gauge and a slightly altered gear-position indicator. There's also an electronic ignition advance in place of last year's mechanical unit, and an optional quarter-fairing.

The DOHC vertical-twin engine, however, enters 1983 virtually unchanged. And it's the 448cc engine's power which best completes the Katana/GS1100E connection implied by the styling; with a quarter-mile time of 14.2 seconds, the GS450E is quicker than any of 1982's 400/450-class members. There's ample power from idle up to 7000 rpm, with a healthy surge from 7000 to the 9500-rpm redline. Twin 34mm Mikuni CV carburetors allow a mercifully quick warm-up on cool mornings and provide the clean, snappy throttle response that helps make the GS's engine a delight to use.

A speedy middleweight, with image-consciousness.

Vibration and a balky clutch diminish that delightfulness, though. The 450E is smooth enough until the revs reach approximately 5000 rpm, which is 55 mph in sixth gear; beyond that, the engine vibrates in defiance of its helical-gear-driven, dual-weighted counterbalancer, creating an annoying buzz in the grips and footpegs. And once the engine gets hot, clutch-plate drag often makes neutral maddeningly elusive.

The inadequate rebound damping in both the air-assisted front fork and preload-adjustment-only rear shocks is even more annoying. In town, the GS450 gives a choppy ride, especially over regularly spaced freeway-slab expansion joints. And outside of town, where a rider might want to make full use of the light, neutral steering and the excellent ergonomics offered by the low handlebar and rearset footpegs, the under-damped suspension renders the GS450E's aspirations towards Katana-competence as so much wishful thinking. Immoderate cornering speeds have the bike bobbing up and down at both ends, and while the wheels do keep to the chosen line, the overall impression is that you're crowding your luck. An exhaust pipe heat-shield and the centerstand limit ground clearance on the right and left sides; a rider touching those parts on the pavement has a little tread left before he runs off the tires. It would be preferable to have the folding footpegs touch down first, rather than the unyielding chassis parts.

And it also would be preferable to have the GS450E approach its role models in areas other than styling and power. But that's the risk inherent in trading on another's image; similar form doesn't guarantee similar performance.

—Charles Everitt

SUZUKI GS450E

Importer: U.S. Suzuki Motor Corporation
3251 East Imperial Highway
Brea, California 92621

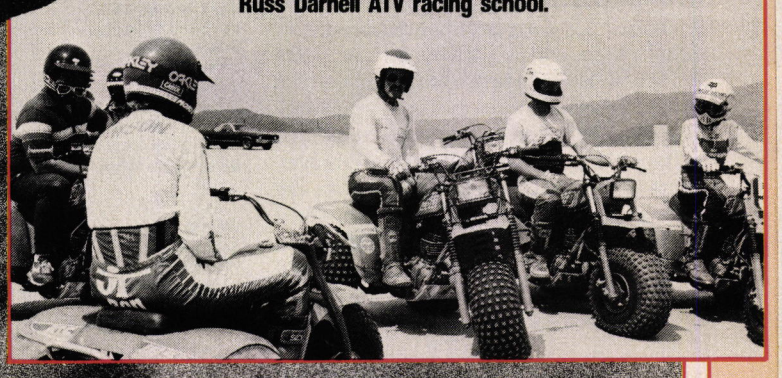
Category	street
Suggested retail price	$1999
Engine type	four-stroke vertical twin
Valve arrangement	double overhead camshafts
Bore and stroke	71.0mm x 56.6mm
Displacement	448.2cc
Compression ratio	9.0:1
Carburetion	two 34mm Mikuni constant-vacuum
Gearbox	6-speed
Front fork/wheel travel	Showa air-spring, 33mm stanchion tube diameter/5.4 in. (136mm)
Rear shocks/wheel travel	dual Kayaba shocks, 5-way adjustable spring preload/ 3.9 in. (98mm)
Wheelbase	55.7 to 57.0 in. (1415 to 1447mm)
Seat height	30.7 in. (780mm)
Weight	384 lbs. (174.1kg)
Best 1/4-mile acceleration	14.236 sec., 93.16 mph (150 km/h)
Top speed (calculated)	106 mph (171 km/h)
Stopping distance from 60 mph	131 ft. (43.6m)
Fuel consumption	39 to 49 mpg (17 to 21 km/l)
Warranty	12 months unlimited mileage
Available colors	black or red

TRI, AND TRI AGAIN:

The Tricks of the Trikes

True confesstons of an MX-chauvinist pig.

BY RON LAWSON



A clear case of moto-espionage; an undercover motocrosser infiltrates the Russ Darnell ATV racing school.

• "And I promise you, at the end of today you'll be a quicker, better rider than you are now." While Russ Darnell was making the introductory speech at the start of his ATV racing school, I sat on my borrowed Honda 185S and listened, only half interested. You see, I wasn't really one of these guys. I was from the Other Side—a *motorcyclist.* The way I saw it, it was just like the rivalry between fighter and bomber pilots during World War II: ATV racers were all washed-up motocrossers. Maybe they had punched out at a crucial moment in the first turn, or perhaps the competition just was too rough, but for whatever reason, they had sunk to a far less demanding occupation.

Motocrossers, on the other hand—real two-wheeled motocrossers—were true athletes. I had nothing against three-wheelers, but ATV racing just seemed like a watered-down, no-talent version of motorcycle racing. I gave up tricycles when I gave up torching ants with a magnifying glass on the school playground, and neither habit has appeared particularly appealing since. But, as several readers have pointed out, the C in Honda's ATC designation does stand for *Cycle*, and this *is* CYCLE GUIDE, so I didn't feel too compromised when Darnell's ATV school rolled into town and I was volunteered to attend. Fellow Associate Editor and former motocrosser Charlie Everitt also was volunteered for the mission. I knew we would be dazzling.

It's probably Steve Wise's fault. He gave every motocrosser in America a fat head when he made his seemingly effortless and immediately successful switch to roadracing. It suddenly became common knowledge: Motocrossers can do anything. Darnell himself seemed like proof. He's a motocrosser, you know, and a darn good one, too. He was one of the first Americans to go to Europe to learn how it's done. Now he's stateside, showing them how it's done with a traveling MX and ATV school. I figured he was a good sort of person to have around for my first ATV ride. I mean, it could be hours before Charlie and I were great, and a few tips would be appreciated.

So I sat there on the 185 thinking of how we were going to impress everyone, while Darnell went on: "First we'll try a few slalom runs through these barrels, then we'll move on to the TT track." I looked down at Saddleback's baked surface. That should have been my first clue that things weren't going to go as planned. Three-wheelers and sand go together; everyone knows that. And even though Saddleback is a great place for bikes, it has about as much sand as the North Pole. The idea of bouncing around on hard Southern California adobe seemed like slightly less fun than roller-skating in quicksand.

"Now, before we get started," Darnell asked, "how many of you used to ride, or still ride motorcycles?" I cleared my throat and raised my hand as casually as I could. Yeah, it's no big deal, I'm a hero. Darnell probably was going to set us aside in a more advanced group while he concentrated on the others. He took a couple of seconds to note the faces associated with the upheld hands. "Okay, you guys are starting off with a disadvantage, because before you can be taught, you have to be untaught." My jaw hit the tank. Russ was a traitor; he'd punched out.

Charlie and I watched silently while Benedict Darnell demonstrated. He weaved through the barrels of the slalom course, making it look easy. "You should have noticed," he said when he rejoined the group, "I don't turn by steering, and certainly not by leaning. It takes a sharp body movement and a blip of the throttle to force the rear end out. Sliding the rear wheels is the *only* way to get a three-wheeler around a corner. The front wheel's only function is to keep the engine off the ground." Sure, Russ.

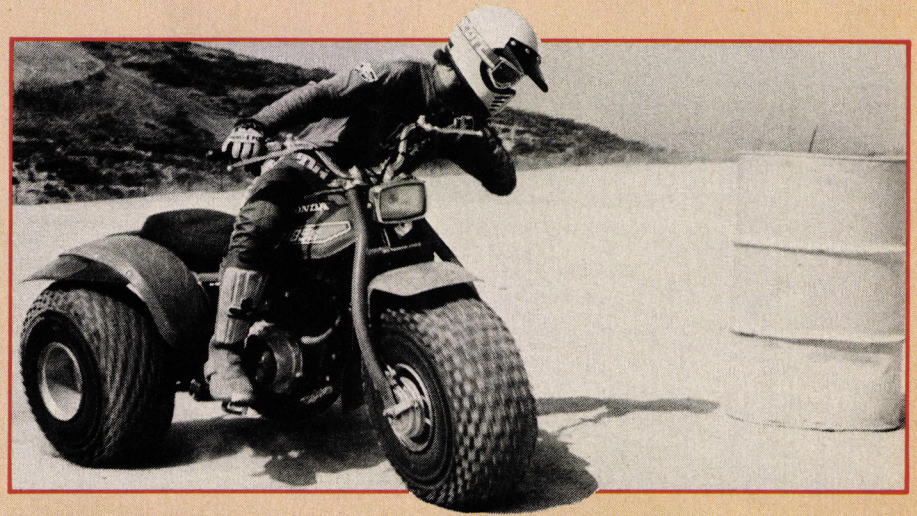
Well, learning is what schools are all about, and as soon as class started, I began learning. I learned how to hit barrels, how to knock barrels over and how to be hit by barrels. Before, somehow it always seemed that having three wheels meant you couldn't fall over. You can—and I did.

My convictions that motocrossers were naturally superior weren't being strengthened. On the TT course, the other riders took turns running over the foot that I invariably stuck out in each turn—that is, when I wasn't running over it myself. And the highlight of the day came when I crashed while giving Darnell a ride back to the pits. He just jumped off the back and shouted instructions while I bounced down the hill. Charlie wasn't doing much better. Sometime in the middle of the day, he flew off the outside of an MX-style berm and performed what would go unchallenged as the day's most spectacular crash.

After all the instruction had ended, and I was too dazed to object, Darnell organized a trailride. There was nothing left of my original premise that ATVs were easier or in any way less demanding to race than motorcycles. I'd just tag along, trying to make all my mistakes when no one was looking. Strangely enough, though, I didn't make *that* many mistakes. Even the more experienced riders in the group seemed more at ease. And just for a moment, my thoughts wandered from my flattened ego, and I made a surprising discovery: I wasn't miserable. In fact, I was allowing a touch of enjoyment to slip past my guard. Then it gradually became clear. All the time I had been thinking of three-wheelers as an alternative—no, a threat—to motorcycles, instead of just taking them at face value. The battle lines all were imaginary.

My mistake was in measuring the two different sports on the same macho-scale instead of separate fun-scales. Once the fighterpilot image was replaced by a kid-in-the-sandbox outlook, the trailride took on a different perspective. Darnell took us (that's *us,* not me and them) through some impossible gullies where we crashed and didn't mind. No one was watching or snickering and the cameras weren't rolling. He took us over some narrow trails where we ran over our feet and didn't mind. And Darnell even crashed on a steep uphill and didn't mind. "I usually pick up something from my own schools," Darnell said afterward. "I'm always learning."

So are we all. •



Bike-to-barrel combat was the first order of business in basic training

Part One in Russ Darnell's tri-level assault on ATV ignorance.

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DATSUN HEAVY-DUTY LONG BED:
BORN TO BE

BORN TO BE DRIVEN HARD AND CARRY A TON OF ACTION.

Ride a dirt bike across the desert, boogie a dune buggy along the beach... or tote a bed of bricks to the job site.

But before you can go for it, you've got to get to the designated area.

That's the kind of hauling the Datsun Heavy-Duty Long Bed was born for—adventures as big as its payload: 2,100 pounds.

Over a ton! And with the muscle to move it: 2.2 liters of twin-ignited, crossflow-hemihead NAPS-Z guts; on rugged 8-ply tires, beefed-up rear springs and front stabilizer bar.

Plus the long bed to haul bikes with the tailgate closed and the quality, built in by Nissan, to go the distance. Is it any wonder over the past 22 years truckers have bought over a quarter of a million more Datsuns than Number Two?

Any truck can haul you to work. The Datsun Heavy-Duty Long Bed was born to be driven to the action.

31 EST. HWY MPG | 25 EPA EST. MPG

Use estimated mpg for comparison with standard 4-speed. Actual mpg may differ depending on speed, trip length and weather. Hwy mpg will probably be less. California mpg lower.

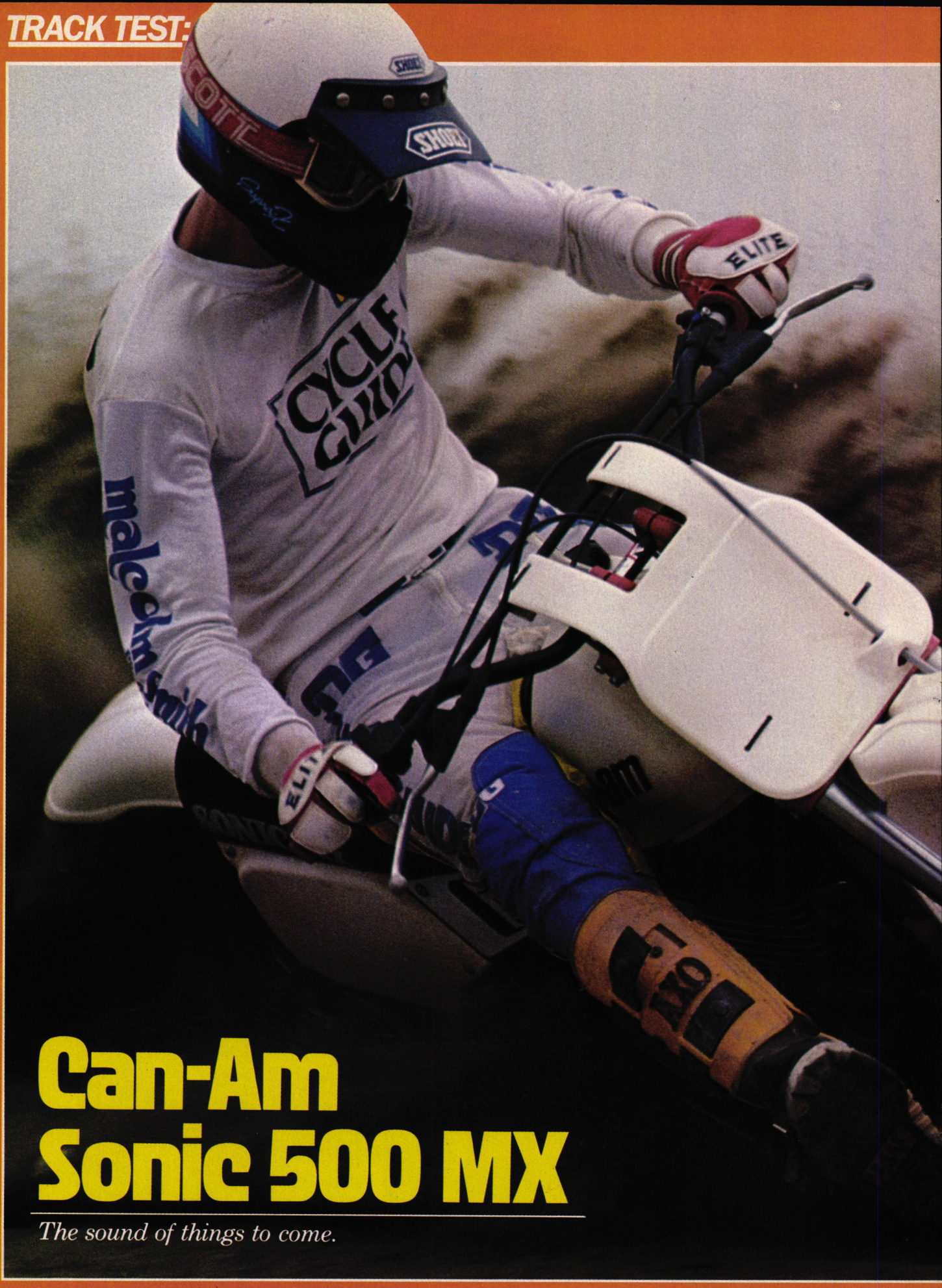
DATSUN
WE ARE DRIVEN

THE NAME OF QUALITY
NISSAN
NISSAN MOTORS

Product of NISSAN

DRIVEN!

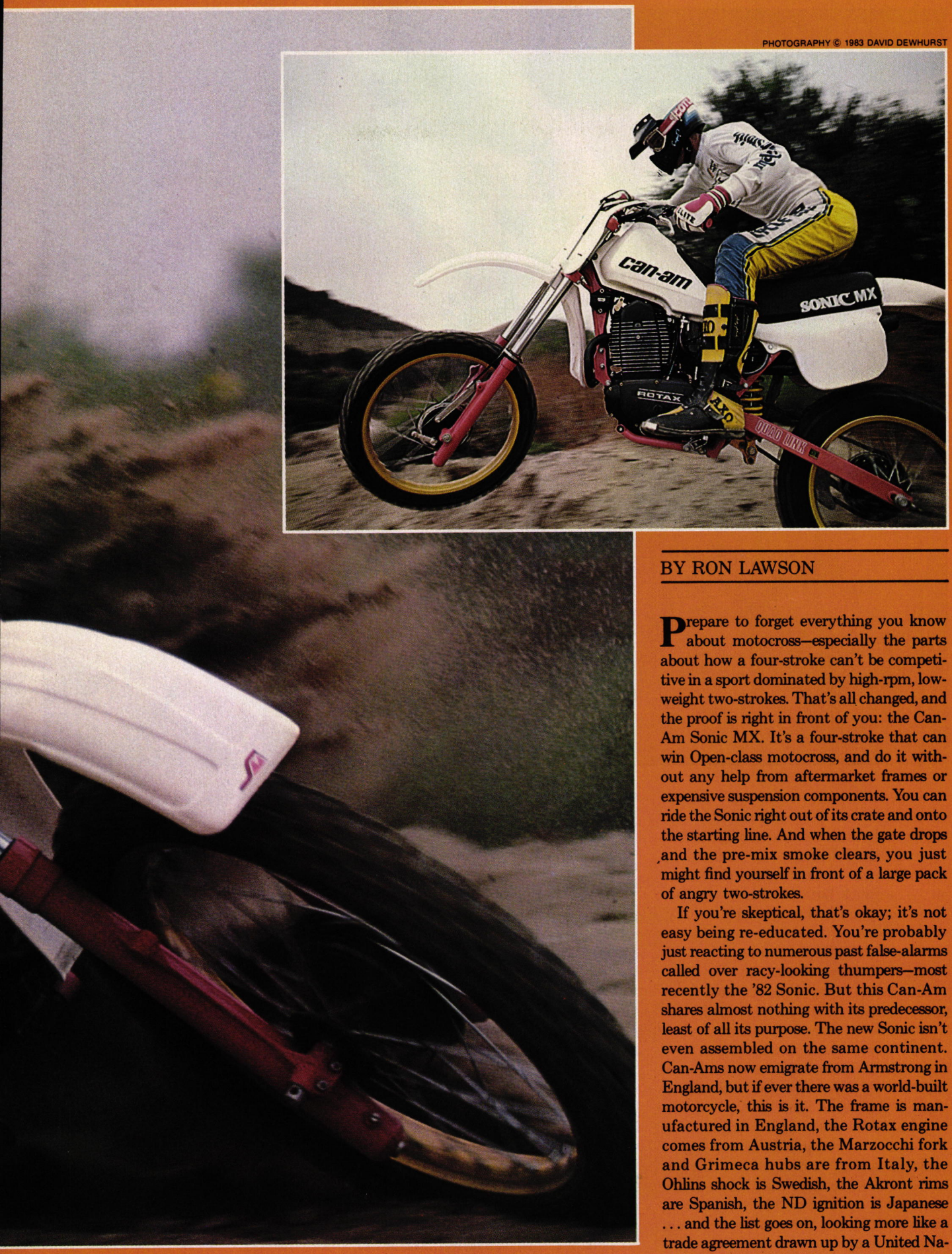
SPECIFICATIONS.	
Wheelbase (in.)	110.8
Length (in.)	187.0
Width (in.)	63.4
Height (in.)	61.8
Turning circle (curb to curb, ft.)	34.1
Min. ground clearance (in.)	7.9
Curb weight (lbs., Federal)	2585
Max. GVWR	4800
Payload (lbs.)	2100
Fuel capacity (gal.)	16.9
Bed length (in.)	88.8
Bed width (in.)	56.9
Bed depth (in.)	15.6
Horsepower @ 5200 RPM	98
Torque @ 2800 RPM	127
Engine displ. (liters) 4-cyl. NAPS-Z	2.2
Transmission, manual, speeds	4
Battery, maintenance-free (amp/hrs)	60
EQUIPMENT.	
Frame	ladder-type
Brakes	power-assist front disc/rear drum
Wheels & tires	5J14, E78 14/8 bias ply
Front suspension	independent adjustable torsion bars



Can-Am Sonic 500 MX

The sound of things to come.

PHOTOGRAPHY © 1983 DAVID DEWHURST



BY RON LAWSON

Prepare to forget everything you know about motocross—especially the parts about how a four-stroke can't be competitive in a sport dominated by high-rpm, low-weight two-strokes. That's all changed, and the proof is right in front of you: the Can-Am Sonic MX. It's a four-stroke that can win Open-class motocross, and do it without any help from aftermarket frames or expensive suspension components. You can ride the Sonic right out of its crate and onto the starting line. And when the gate drops and the pre-mix smoke clears, you just might find yourself in front of a large pack of angry two-strokes.

If you're skeptical, that's okay; it's not easy being re-educated. You're probably just reacting to numerous past false-alarms called over racy-looking thumpers—most recently the '82 Sonic. But this Can-Am shares almost nothing with its predecessor, least of all its purpose. The new Sonic isn't even assembled on the same continent. Can-Ams now emigrate from Armstrong in England, but if ever there was a world-built motorcycle, this is it. The frame is manufactured in England, the Rotax engine comes from Austria, the Marzocchi fork and Grimeca hubs are from Italy, the Ohlins shock is Swedish, the Akront rims are Spanish, the ND ignition is Japanese . . . and the list goes on, looking more like a trade agreement drawn up by a United Na-

Continued

tions special committee than a list of parts for an Open-class motocrosser.

You might expect such an amalgamation of pieces from different corners of the globe to perform like a pile of mismatched parts on the racetrack, but that's hardly the case. Each component was chosen carefully, with but one goal in mind: to make the Can-Am Sonic MX the most potent four-stroke motocrosser ever made.

That wasn't easy. It would have been much simpler to attempt to build the world's greatest four-stroke enduro or play-bike. The machine's weight would have been right in the ballpark, and the Rotax engine would have been ideal for thumping through the woods. But Can-Am had loftier goals for the Sonic. By offering it in full MX trim, by putting it up against higher standards and stiffer competition, Can-Am has attempted to open the door to a new age. And in spite of its numerous inbred disadvantages, the Sonic has successfully stepped through.

The Sonic 500MX is proof that it doesn't take pre-mix to win MX.

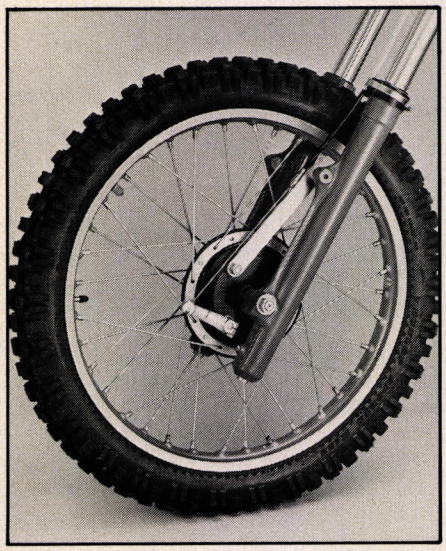
Those disadvantages include the fact that four-stroke engines are heavy and tall, and that they generally don't produce as much horsepower as two-strokes of the same displacement. And although these drawbacks have been minimized on the Sonic, it still has all of them. Chances are, for instance, that the 272-pound Sonic will be the heaviest motocrosser on the starting line. To put that number in perspective, consider that the heaviest of the two-stroke Open-crossers is about 20 pounds lighter, and the Maico 490 Enduro we tested last month is 10 pounds lighter. But an '82 Honda XR500 is almost 20 pounds *heavier*. So while the Sonic is a heavy motocrosser, it also is the lightest 500cc four-stroke in recent history.

Still, 272 pounds is hefty for a motocrosser. On a smooth track, you won't notice that weight right away, and for the first few laps you'll swear it weighs no more than an average two-stroke Open bike. But as the race goes on, you'll notice that when the Sonic takes a sidestep, it isn't very willing to return to its original course. And you'll also find that your endurance isn't quite what you thought it was. It probably is, but you'll just have been working overtime to keep those 20 extra pounds on the track and under control.

At least you won't have to fight the machine in the corners, for the Can-Am is one of the easiest-turning dirt bikes ever made. You barely get a chance to finish *thinking* about turning before you've actually turned. And after you learn the Can-Am's quick-steering habits a little better, you won't have to think much about turning at all. The Sonic will do all the work.

Flip-lid allows for fast fixes

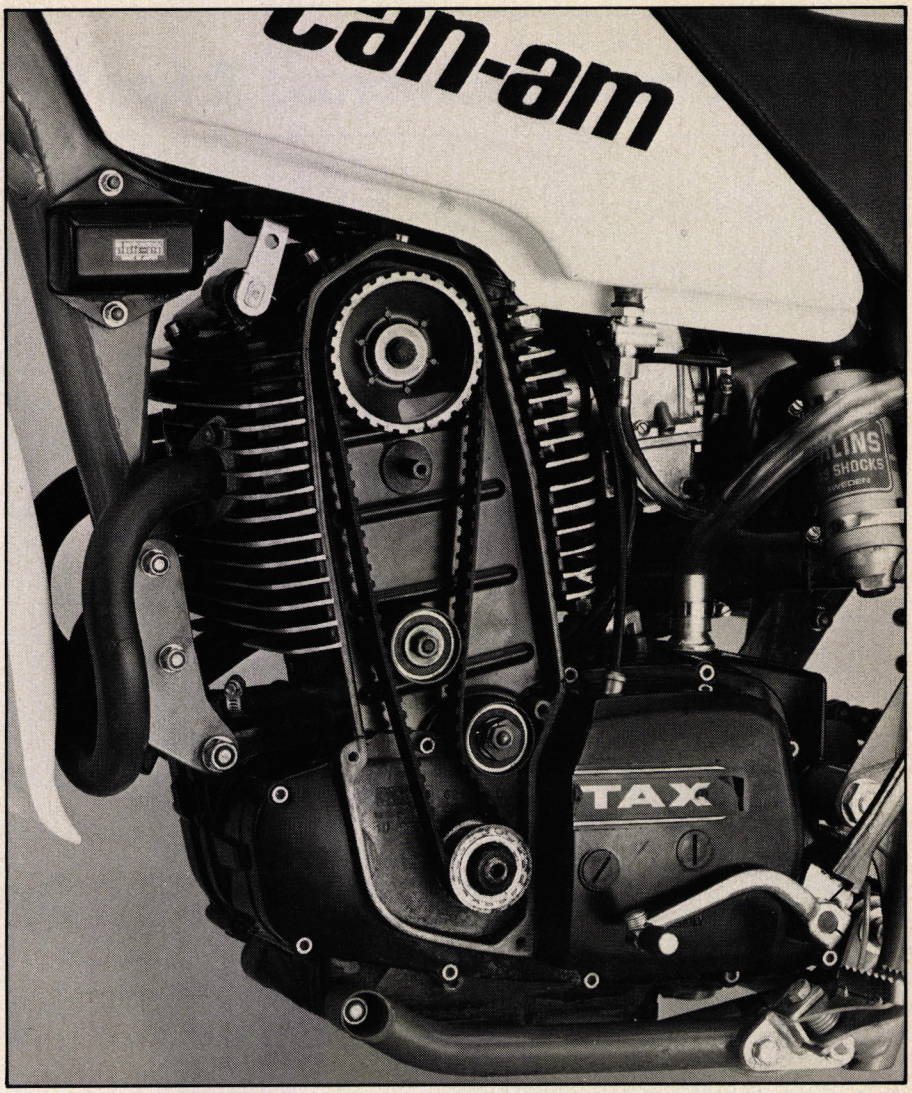
Easy disassembly—intentional or not.



Can-Am front wheel looks heavy-duty

But has spindly spokes and a flexy fork.

PHOTOGRAPHY © 1983 VIC HUBER



A toothed rubber belt hides under the Rotax engine's plastic sidecover

Lighter, quieter and cleaner way to keep the Can-Am's cam on time.

That quickness is just as noticeable while trail riding, where the Sonic feels downright agile. Cutting in between the trees on a narrow trail is as easy as on any 175cc trail bike. And some of the credit must go to the big single's engine braking, since having a brake and the throttle combined in one control has its advantages. As soon as you roll off the gas, there's considerable weight transferred to the front wheel and the fork compresses, which makes the bike eager to dart off in one direction or another.

But the Sonic's agility can't entirely be attributed to the engine. There are other four-strokes that slow more dramatically when the throttle is chopped but don't turn as well. The Can-Am's Dunlop K139 front tire certainly helps, but most of the machine's manners simply are the result of a well-designed chassis. The engine placement, rake, trail and rider-positioning allow the Sonic to lay claim to the inside line as personal property.

If the idea of riding a twitchy, nervous-steering bike down a rough straight doesn't appeal to you, though, don't worry: The Sonic can hold a line through the rough stuff with the best of them. There's no high-speed twitch or front-end nod—although when the track gets *really* rough, it becomes clear that the suspension is one of the few areas of the machine that have been compromised. The Sonic is a racer, but Can-Am also anticipated selling a lot of them to play-riders and fire-roaders; so the rear suspension is calibrated accordingly. A single shock is connected to the swingarm via four links—hence the name Quad Link—and the Ohlins damper is one of the best in the business. But the spring rate is far too soft for motocross. Throughout the test, we continued to crank the preload higher and higher to prevent bottoming. And we also had to keep increasing the rebound damping until it was on the fourth-highest of its 12 settings. Still, the rear end was too soft for all-out racing. A rapid succession of whoops sometimes made the Can-Am jump from side to side like a Maytag filled with bricks.

But to the Ohlins' credit, the rear-suspension never seemed to bottom harshly. No bone-cracking klunk; the rear would just run out of travel. And while the spring is soft, that isn't an incurable problem. Can-Am has no plans to offer spring options, but other distributors do. Husky Products, for one, offers a selection of 15 different springs for the Ohlins shock.

If trailriding is your game, though, you won't need to fiddle with the rear end at all. The suspension is ideal for a fast pace on gnarly trails. And if the obstacles of a motocross track can't make the Ohlins hit bottom with a smash, then a backwoods trail has little chance of doing so.

A much wider range of riding falls under the Marzocchi fork's capability. It provides an excellent ride on the trail, and all it needs to adapt to a motocross environment is a slight increase in oil level. With 10W oil

Continued

Four-Stroke Motocross Takes to the Line

© 1983 DAVID DEWHURST

• When you MX-race a four-stroke, you're bucking the system. It's like wearing a tuxedo to the beach or dropping a scoop of raspberry ice cream into a glass of champagne. It might be nice, but who wants to spend the money to find out?

All that very likely could change now that the Sonic MX has arrived. It's a competitive MXer and it costs only a few hundred dollars more than a European Open-class two-stroke. So chances are that more and more riders will make the switch. And if you're one of them, you'll discover that a motocross course looks slightly different from atop a thumper.

For one thing, you'll find that launching from the line is easier than it used to be. With a four-stroke, you almost can't blow it. Instead of holding the gas wide-open and waiting for the gate to drop before you dump the clutch and cross your fingers, you wait for the gate to drop and then just go. It's that easy. Most thumpers, including the Sonic, feel slightly front-end heavy and aren't likely to loop-out if you drop the clutch too abruptly. And because four-strokes usually have a healthy amount of low-end torque, it's unlikely that you'll stall if you don't use enough throttle.

Then you'll hook up surprisingly well, and you may even get the holeshot. But going into the first turn, you'll make your second big discovery—you set up for the turn 20 feet too soon, meaning that you just let the whole pack pass you. That's because it takes time to adjust to four-stroke engine braking. Letting off the gas is like hitting the brakes, whether you're ready or not.

Once the new shut-off and braking points have been learned, you can start cutting your way through the pack and learning all sorts of little facts of four-stroke life in the process. Shifting, for instance, is . . . well . . . different. On one hand, it takes less concentration because if you shift too early or too late it's no big deal—the powerband is wide enough to make up for your mistakes. But at the same time, the task is physically more difficult. You can't shift without the clutch while the throttle is open because there's too much torque-loading on the gear dogs. That's no different from a lot of two-strokes, but you can't shift a four-stroke when the throttle is closed either, because the gear dogs *still* are torque-loaded, this time from engine braking. The trick, then, is either to use the clutch or time your shifts to coincide with the transition from acceleration to deceleration that occurs the instant you close the throttle.

You'll also learn to make your shifts earlier than your instincts tell you. Most thumpers sound downright awesome when they're wound to the limit, but most of them actually produce more-efficient power in the lower rpm ranges. The Sonic is one of the few exceptions. It doesn't mind being revved, but there's no reason for a high-rpm charge when the machine produces such good torque.

Keeping the revs low also has another advantage: You might be able to *hear* the competition. On the Sonic, all you generally can hear is the sound of your own motor. That gives the two-strokes an advantage, because they can sneak up on you, but you can't sneak up on them.

There are a host of other things you'll have to relearn about racing, too. For example, it's easier to pass going into a turn than coming out. Also, motocross is a lot more tiring than it used to be, and winning is a lot tougher. But that's okay. Because when you take first on a thumper, somehow winning is just *better*. —*Ron Lawson*

resting 5.75 inches from the top of the fork tubes (instead of the stock level of 6.0 inches), the spring and damping rates work well for motocross. But on the track, it's obvious that the 40mm stanchions aren't up to the task of holding the 272-pound Sonic on course. The fork will absorb the nasties with the best of them, but it flexes noticeably when the bumps and jolts start getting closer and larger, and are at a sharper angle to the front wheel.

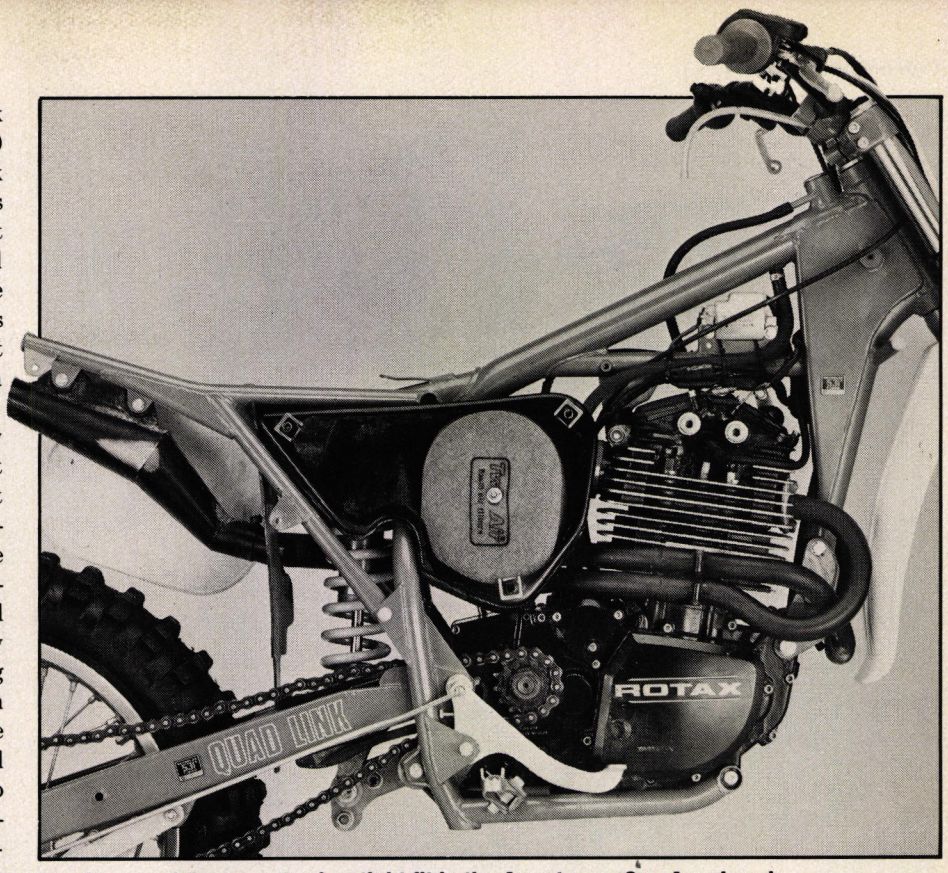
Still, the suspension works surprisingly well overall—certainly better than that found on any other four-stroke yet. But what truly sets the Sonic apart isn't its suspension or even its ability to cut an inside line; this bike's trump card is it's powerplant. The Rotax engine, designated Model Number 506 in spite of the fact that it only displaces 494cc, is different from anything you'll ever find on the track or the trail, in both construction and performance. The four-valve single has a belt-driven overhead cam, and unlike last year's model, it uses no counterbalancer. The balancer was eliminated because its removal cut approximately seven pounds of weight—more importantly, seven pounds of *flywheel* weight. That results in an unusually quick-revving four-stroke motor. In fact, if somehow you were able to ride the Sonic blindfolded and ear-muffed, it would take you a while to figure out that you were on a four-stroke. Nothing in the acceleration or the throttle response would ever give it away.

What would tip you off is the tractable power delivery. You've probably heard a lot of discussion about how four-stroke power is easier to put down on the track, and that's not just idle talk. The Sonic produces the kind of horses that pull the machine forward rather than kick it sideways.

Of course, the effectiveness of the Sonic's power really depends on the type of motocross course. Under loamy, high-traction conditions, chances are the two-strokes will have the upper hand. The Sonic's power is strong, but keeping up with the new generation of 480cc-to-500cc two-strokes is a tough square to fill. In its present state of tune, the Can-Am will outpull most other Open-classers from the bottom, but it suffers on the top end. It *will* out-accelerate, say, an RM250Z, but KTM 495s and Husky 500s are in another league. If there's traction on the starting line, don't count on many holeshots.

But if there isn't much to bite into, look out; the Sonic will be in its element. The power rolls on so smoothly and controlably that nothing will beat a Sonic for the first 20 feet of a race; and if conditions are extremely slick, nothing will outrace it all the way to the first turn.

Then, of course, there's another advantage to the Can-Am's smooth but forceful power delivery: After the races have ended and the two-strokes have been parked in a dark corner of the garage to await next Sunday, the Sonic is ready to take to the hills. Its linear power and quick handling allow it to compete with anything in the playbike category. But keep in mind that this is a motocrosser, so it has none of the traditional enduro-bike features like a trip-meter or a spark arrestor—in fact, it doesn't even have much of a silencer. *Continued*



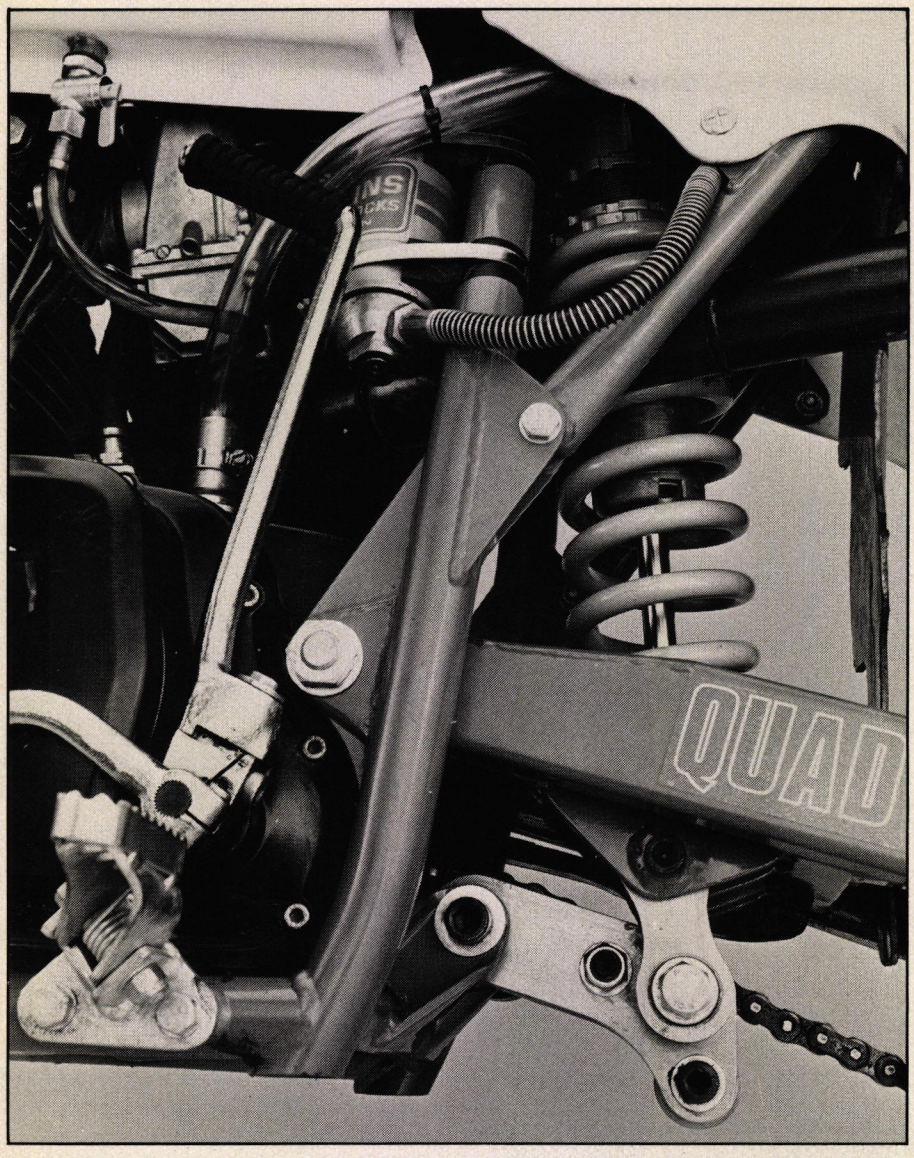
The 90-pound Rotax motor is a tight fit in the Armstrong/Can-Am chassis

At 272 pounds, the Sonic is the heavyweight titleholder in the Open class.

It took nine countries to build the Sonic, but the only American part will be you.

COMPARATIVE TEST DATA:

Make & Model	Wheel Travel Front/Rear, in.	Weight (fuel tank empty), lb.	Weight bias Front/Rear, percent	Steering head angle/Trail, degree/inches	Transmission, number of speeds
Can-Am Sonic MX–'83	11.6/12.1	272	47.4/52.6	28.0/4.2	5
Honda XR500R–'82	9.5/10.0	289	44.3/55.7	28.0/4.4	5
Honda CR480–'82	11.5/12.0	232	48.5/51.5	27.2/4.2	4
Husqvarna 500CR–'82	11.8/12.0	239	46.4/53.6	30.5/6.0	4
Maico Alpha 1 490–'82	11.6/11.5	248	47.2/52.8	28.5/5.0	5
Suzuki RM465–'82	10.8/12.0	234	46.9/53.1	29.3/4.8	4



Top-of-the-industry Ohlins single shock connects to the rising-rate Quad Link system

But bottom-of-the-travel spring rate limits the machine's motocross potential.

What's more, long trail expeditions were difficult with our Sonic, mainly because we didn't want to get too far from the toolbox. The bike was the very first (serial number 000001) to roll off of Armstrong's production line, and it had quite a few parts that weren't ready for combat. Spokes and chain adjusters broke as quickly as we could bolt new ones into place. And the boot leading from the airbox to the carburetor was too close to the exhaust pipe, so we burned through two boots before effecting a temporary cure by wrapping insulation around the pipe.

There were other problems. The seat foam wasn't dense enough, the chain rubbing-block self-destructed and the Amal carburetor had an unfortunate tendency to turn on its own choke in the middle of a ride. But Can-Am is well aware of all these problems and is working on cures. Later production models, we're told, won't even be equipped with Amal carbs, but will have Mikunis instead. See, one advantage of the move to the Armstrong plant in England is the motorcycles are being produced continuously rather than in one big batch, so it's much easier for the company to make running changes during production.

Even if all production models do have these nickel-and-dime problems, though, they won't seem all that important when you consider that this is the most competitive four-stroke ever mass-produced. But make no mistake: If you show up on the line with a Sonic, you're not going to have an advantage. You'll have to ride better, be stronger and try harder, but you *will* be able to win. Just think of that—winning on a thumper. Forget that it's a great trail bike . . . *it can win.*

That's not even the best part. Sure, the Sonic is the first of its kind; but even better, chances are it won't be the last. ●

Ride Review

• I never thought it would come to this. If just a month ago you had predicted that I was going to fall head-over-valves in love with a 500cc, 272-pound lump of four-stroke motocross bike; if you had forecast that my favorite all-around dirt motorcycle of 1982 would be a mongrel Can-Am that came together from more nations than the U.N. General Assembly; if you had even *suggested* that I'd go completely bananas over a bike so utterly unreliable that I'd have to spend four hours working on it for every 40 minutes of riding it; if you had done any or all of that, I'd have thought you more psycho than psychic.

But it's all true, every word of it. There's absolutely no reason in the world why I should like this thing—other than the fact that it's far and away the fastest production dirt-thumper ever; that when it's cooking down the straights wide-open, the unmuffled thunder that rolls out of the exhaust sends cold chills up my spine; that it's the finest-steering MXer I've ridden since CZs were in vogue; and that it's so much fun to ride that only darkness and fatigue can coax me off of it. I know full well that it's nowhere near as competitive as most Open-class two-strokes. But frankly, Scarlet, I don't give a damn.

—Paul Dean

• Recently I've been thinking about buying a dirt bike, something I can call my own instead of having only brief relationships with test bikes. I want something that's MX-competitive, as well as providing plenty of fun on a day-long ride in the hills. I also don't want to lay out my hard-earned cash for a bike that will be obsolete halfway through the season.

If you've been looking for much the same thing you'll know that it's very elusive. In fact, I couldn't find *anything* that filled those requirements—until I rode the Can-Am. If I didn't know better I'd swear the big thumper was designed just for me, because it does everything I want, better than any two-stroke I have ridden.

Despite its typically four-stroke weight, the Can-Am is a very capable race bike. It has the horsepower to stay with the fastest stuff from Japan and it also has the quickest-steering chassis I've ever tried, without giving up any high-speed stability.

That quick steering also makes the Can-Am fun in the woods. And the fast—but docile—thumper-motor is perfect for cowtrailing all day long. In fact, there isn't anything that the Can-Am does badly at all. And it does so many things so well that I can't think of a better bike to live with long-term. *—David Dewhurst*

CYCLE GUIDE SPECIFICATIONS

Can-Am Sonic MX — motocross

IMPORTER: Bombardier Corporation, Box 6106, Duluth, Minnesota 55806

SUGGESTED RETAIL PRICE: $3100 (approx.)

ENGINE

Type ..... four-stroke vertical single
Valve arrangement ..... single overhead camshaft, four valves
Bore and stroke ..... 89.0mm x 79.5mm
Displacement 494.6cc
Compression ratio 10.5:1
Carburetion ..... one 36mm Amal slide/needle
Air filter ..... dual-stage washable oiled foam element
Lubrication ..... dry sump
Starting system ..... primary kick
Ignition ..... flywheel-magneto CDI
Charging system ..... none

DRIVETRAIN

Primary drive ..... straight-cut gears; 2.375:1 ratio
Clutch ..... wet, multi-plate
Final drive ..... #530 chain (5/8-in. pitch, 3/8-in. width); 3.286:1 (46/14) ratio

Gear	Internal gear ratio	Overall gear ratio	MPH per 1000 RPM
I	2.909	22.701	3.46
II	2.000	15.607	5.04
III	1.400	10.925	7.19
IV	1.118	8.722	9.01
V	0.913	7.125	11.08

SUSPENSION/WHEEL TRAVEL

Front ..... Marzocchi air-spring, 40mm stanchion tube diameter/11.6 in. (295mm)
Rear ..... single Ohlins shock, 10mm spring preload adjustment, 12-way rebound damping adjustment/12.1 in. (309)mm)

BRAKES

Front ..... drum, single-leading shoe
Rear ..... drum, single-leading shoe, rod-operated

TIRES

Front ..... 3.00 x 21 Dunlop Sports K139
Rear ..... 5.00 x 18 Dunlop K-88

DIMENSIONS AND CAPACITIES

Weight ..... 272 lbs. (123.4kg)
Weight distribution ..... 47.4% front, 52.6% rear
Wheelbase ..... 59.7 to 60.7 in. (1517 to 1542mm)
Seat height ..... 37.6 in. (955mm)
Handlebar width ..... 33.4 in. (848mm)
Footpeg height ..... 16.1 in. (410mm)
Ground clearance ..... 12.8 in. (325mm), at shock linkage
Steering head angle ..... 28.0 degrees from vertical
Front wheel trail ..... 4.24 in. (108mm)
Frame ..... tubular Reynolds 531 steel, single front downtube
Oil capacity ..... 2.9 qt.(2.7l)
Fuel tank ..... fiberglass, 2.5 gal. (9.5l), no reserve
Instrumentation ..... none

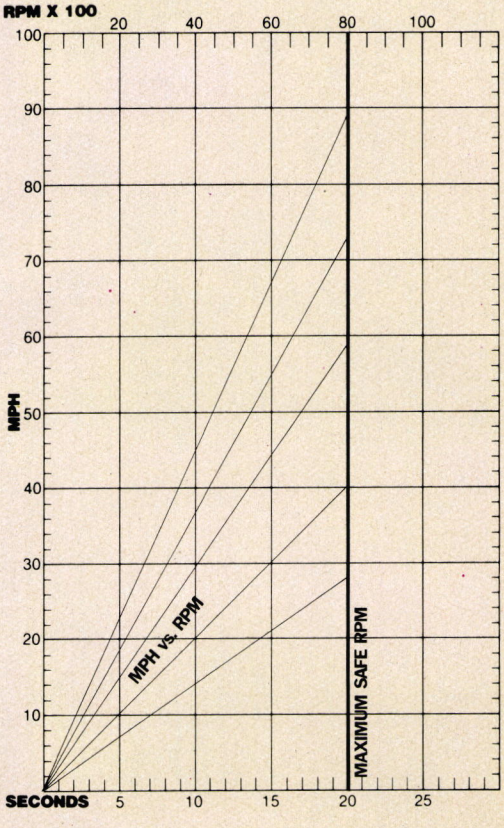
PERFORMANCE

Top speed (observed) ..... 86 mph (145 km/h)

WARRANTY: none

AVAILABLE COLOR: white only

All weights and measurements are taken with machine unladen and fuel tank empty



PHOTOGRAPHY © 1983 DAVID DEWHURST

TRACK TEST:

Husqvarna 250CR

The image tries a hot new line but the motorcycle sticks to the same old groove.

BY PAUL DEAN

With bright, vivid moto-graphics becoming so popular these days, a snow-white motocross bike with a baby-blue seat and a yellow-and-blue stripe squiggling all over its bodywork is no big deal. But to see the name "Husqvarna" on such a bike is, well, shocking, to say the least. It's like discovering that your church pastor moonlights as a punk-rocker.

Husqvarna, you see, has always valued function far more than flash, so its motorcycles traditionally have been the most straightforward, no-nonsense racers on the track. Their styling themes never got more adventurous than the usual silver-gray frames and subdued colors, and the predictable graphics always revolved around what came to be a Husky trademark—polished knee-cutouts on an aluminum gas tank. But although Huskys never were very pretty, they were the essence of pure function. And that, combined with their reputation for being built with materials of the highest quality, made Husqvarna the proudest and most-respected name in off-road motorcycling.

Time, though, has a way of changing things like that. And in motocross racing, where both time and technology whisk along at lightspeed, the Husqvarna image has eroded into virtual obscurity over the last half-decade or so. And for good reason. For one, today's riders want to *look* stylish as well as go fast, but alongside all of the bright red and yellow and green lined up behind the start gate, a Husky is positively drab. Worse yet, Husqvarnas haven't been competitive in years, especially in the 250 class, and the big-name riders who once were fiercely loyal to the brand have moved on to greener pastures. And when you add to all of this the fact that Husqvarna is the only company still building motocrossers with twin shocks rather than with a single-shock, rising-rate rear suspension, you don't have to be an Einstein to figure out how that once-untouchable Husky image got in desperate need of a major tune-up.

Which explains, then, why the Refrigerator White 1983 250CR looks like anything but a traditional Huskycrosser. Those garish graphics probably will disturb many old-line Husqvarna loyalists, but the idea is to lure some new, younger blood into the ranks of CR riders.

Appearance alone won't do the job, however, because a motocross bike has its real worth measured by how competitive it is on the track. To that end, the '83 250CR—as well as all new Husqvarna motocrossers—sports more individual changes than any new model in the last five or six years. And most important of these is the ITC (Immediate Track Control) rear suspension, Husqvarna's response to single-shock mania, for its designers firmly believe that it actually is *superior* to any one-shock system in use today.

Husqvarna dealers should be heartened to hear that. They haven't had a competitive 250-class motocrosser to sell for a long time. The question is, do they now?

Tech Inspection:

Engine:

Of all the model-year changes in the new 250CR, only one is in the power-producing part of the 244.7cc engine. That difference is the addition of two small holes, one per side, that connect the main intake passage to the rearmost transfer ports. These holes help the intake port serve as an auxiliary boost port during the transfer cycle, and allow the rear transfers to function as auxiliary intake ports during the induction cycle.

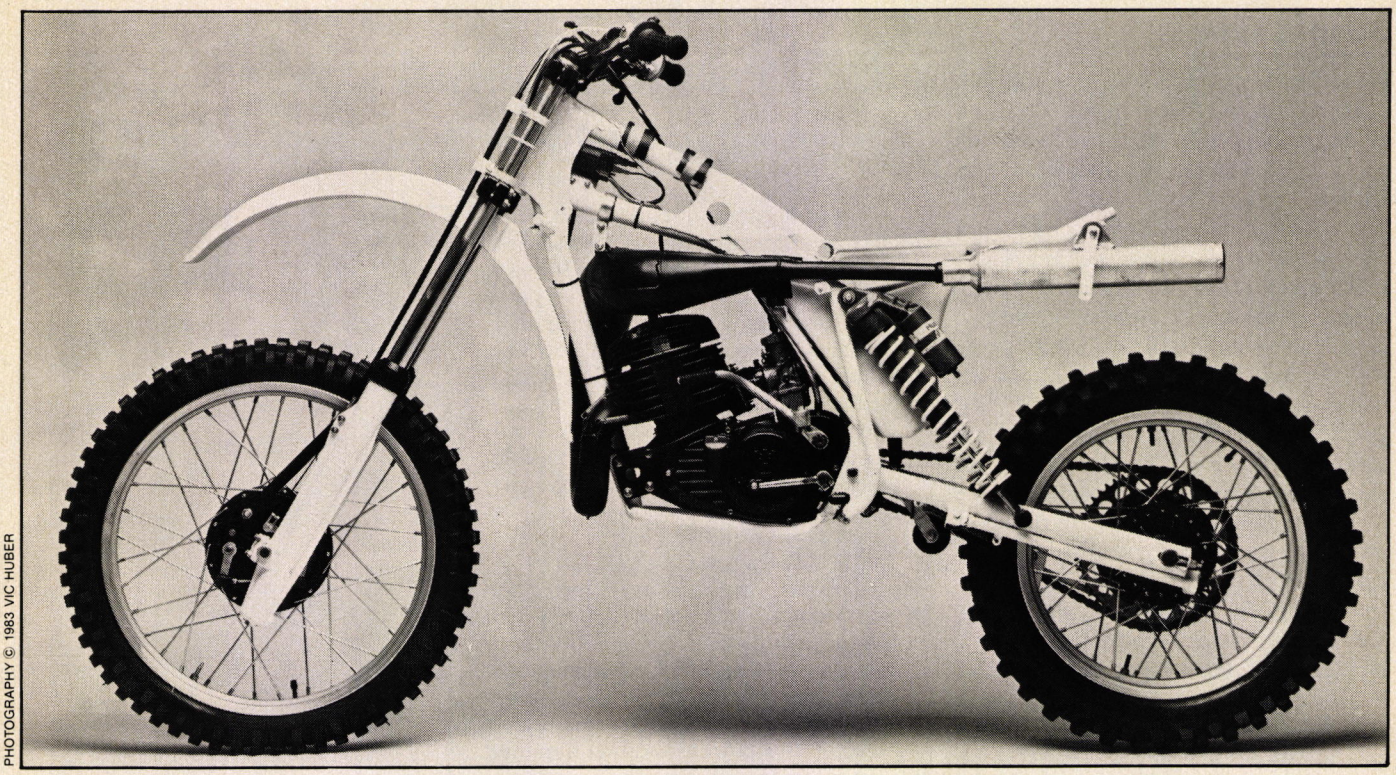
Otherwise, the powerplant is identical to the '82 rendition. A 38mm Mikuni carb and an eight-petal reed valve precede a bridged intake port that has a booster transfer extending upward from its top edge. Four main transfers direct mixture from the crankcase into the combustion chamber, where it is compressed at a ratio of 12.3:1. After combustion, the burned gases escape through a bridged exhaust port and into the exhaust system, which terminates in an aluminum muffler that's longer, unpainted and packed with a higher-grade silencing material for '83.

Drivetrain:

The new 250's clutch, straight-cut primary gears and six gearbox ratios all are identical to the '82's. But the three shifting forks in the transmission are thicker where they fit around their respective gears; and those three gears, obviously, have wider grooves to accommodate the beefed-up forks. The CR uses the same No. 520 chain and 53/12 sprocket combination as before; but the chain guide now is rubber-mounted to reduce its chances of deforming and subsequently derailing the chain should the guide hit a rock or get slammed into a deep berm.

Chassis:

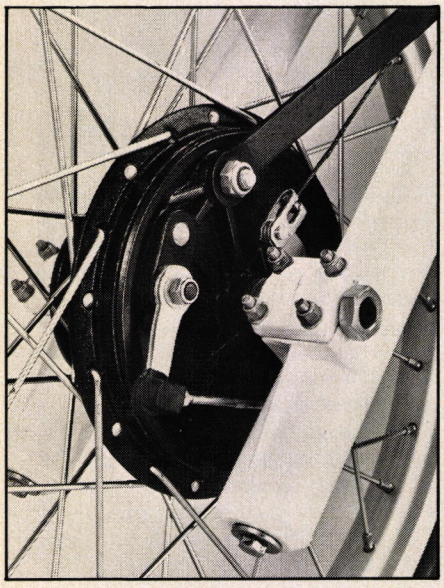
Frame: Aside from being all-white, the frame and swingarm have undergone a complete redesign. The shocks now sit much further forward, the single front downtube has a slight dogleg to clear the central-exit exhaust pipe, and the frame tubes under the engine have been tucked in closer to the cases. The steering geometry has been speeded-up (30-degree head angle and 140mm of trail vs. 30.5/152 on the '82) for quicker handling. For the same reason, the steering head was relocated to move the front wheel 25mm closer to the engine;



PHOTOGRAPHY © 1983 VIC HUBER

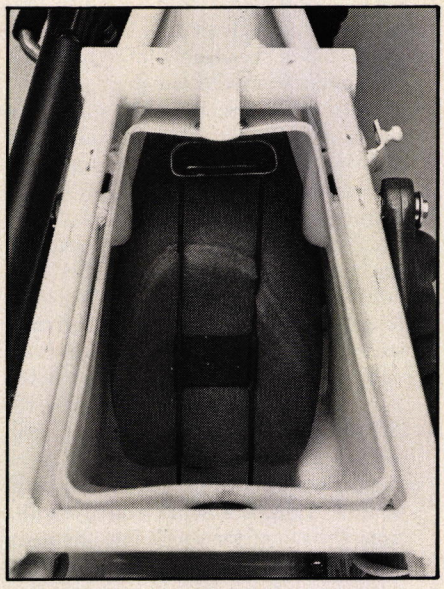
CR's new chassis features repositioned shocks, faster steering geometry and an abundance of Refrigerator White paint

Hoping to quicken not just the handling but also the pulse of today's style-conscious rider.



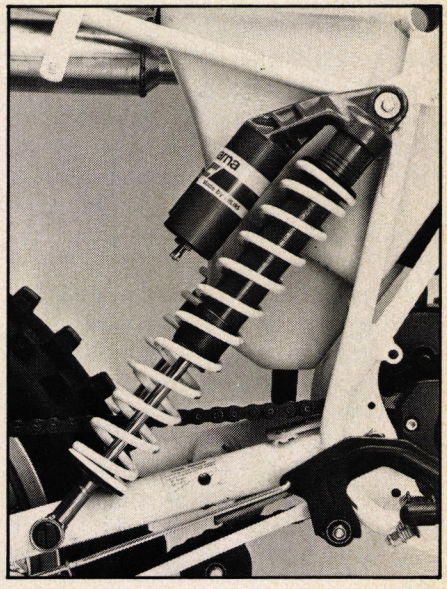
Husky debuts double-leading-shoe brake

Putting a stop to borderline braking.



New air filter is more difficult to reach

And harder to get dirty, too.



ITC shock uses a second damping system

Fluid mechanics to smooth the ride.

that puts more weight on the front end while reducing the wheelbase a like amount.

Wheels: While the front wheel still uses a Nordisk rim and 3.00-21 Trelleborg rubber, it also includes Husky's first-ever double-leading-shoe front brake. The friction material is the same as before, but the shoes contain less magnesium, a change which is claimed to alleviate brake fade by minimizing the brake-shoe distortion that occurs with heat. Neither the shoes nor the entire backing plate, however, will interchange with pre-'83 front wheels. And although the brake drum has the same diameter (160mm) as before, the hub has been recast to make the right-side spoke flange larger and stronger.

The '83 model year also marks Husqvarna's abandonment of the 17-inch rear wheels it has used since 1978. A limited selection of 17-inch tires is the main reason for the change. The new 250 wears a 4.25-18 Pirelli Sandcross knobby in back. Everything else in the rear—conical hub, full-floating brake, spoke diameters—is the same.

Continued

Suspension:

Front: The Husqvarna-built air-spring fork is identical to that used on the 500CR introduced mid-year in '82. It features 40mm tubes and 11.8 inches of travel, and differs from last year's 250CR fork in just two ways: The damper rods have more of a taper in the middle to give less damping in mid-stroke for better compliance, but more damping at both ends to resist topping and bottoming; and the fork uses dual single-lip seals for less sliding friction than with the double-lip type used previously.

Rear: The twin-shock suspension is entirely new for 1983. The longer Ohlins shocks (18.5 inches eye-to-eye, as opposed to 17.25 inches on the '82) have different mounting geometry for more of a rising-rate effect at the rear wheel, even though the springs are only of the straight-rate variety. But most important, the shocks incorporate ITC (Immediate Track Control, explained on pg. 56), a new concept in which the shocks use two completely separate stages of damping to achieve even more of the desired rising rear-wheel rate.

Details:

The extreme forward location of the shocks has forced the elimination of the '82's side-access air-filter element that required no tools to remove. The seat must be unbolted to get at the filter on the new 250; but the element is absolutely huge and sits in an all-new airbox that draws from the exceptionally clean air beneath the rear of the 2.8-gallon aluminum tank.

For smoother rear-brake operation, the brake pedal pivots in ball bearings instead of in the rubberized bushing used for the last two years. The rear-brake torque arm, however, now uses a rubberized bushing at each end instead of a brass bushing at the front and a rubber one at the rear. Husqvarna explains that the rubber is less prone to seizures on the torque arm than it was on the brake pedal, and is easier to replace.

A lower-rise handlebar further aids the steering by helping the rider keep more of his upper-body weight on the front wheel in the turns. All the plastic body parts are new, including the vented front fender and the square, Supercross-style number plates. The seats are blue on all '83 CR Huskys, yellow on all XC cross-country models and black on the WR enduros. And as you have no doubt already noticed, there are no polished knee cutouts on the white gas tank.

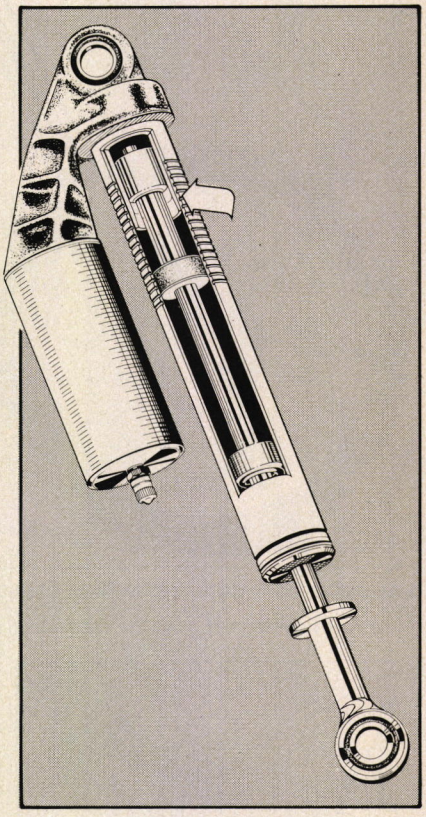
ITC Rear Suspension: Happiness Is Not Being Single

• When it comes to rear shocks, Husqvarna's Swedish designers have adopted the All-American philosophy: If one is good, two must be better. For years they've maintained that a proper dual-shock rear suspension, theirs in particular, could hold its own against any single-shock setup; and now, with the introduction of ITC (Immediate Track Control) on the '83 Huskys, they feel that their duplex-shock arrangement is clearly *superior* to any rear suspension that relies on just one shock.

ITC is a Husqvarna-patented concept that incorporates a second damping system into the Ohlins shock. This system works independently from the main damping system, which is essentially the same as in any non-ITC Ohlins damper. The ITC-shock's shaft, however, doesn't terminate right at the main damping piston; instead it extends about 40mm beyond to accommodate a second piston with a smaller outside diameter. And during the last one-third of shock travel, that secondary piston fits snugly inside an area at the top of the shock's inner bore that has a reduced inside diameter.

During the first two-thirds of shock travel, the ITC piston does absolutely nothing. Since its outside diameter is much smaller than the shock body's inside diameter, it just idly goes up and down while the main piston regulates the damping. But as the shock approaches two-thirds compressed, the ITC piston is forced into the smaller-bore area and traps some oil above it. The piston has no holes and, except for a slight chamfer at the lower end of the reduced bore (to make the transition from the main damping system to ITC less abrupt), is a precision-fit in the smaller bore. So the oil has no choice but to flow through a small orifice leading from the top of the shock into the reservoir. And on the rebound stroke, the piston must "suck" oil back through that little orifice until it is clear of the reduced bore. Hence, any time the ITC piston is inside its bore, the damping—both compression and rebound—is many times greater than with the main system.

As a result, the force of large impacts is absorbed hydraulically instead of with stiff or heavily preloaded springs. Spring rates can be lower, and damping in the first two-thirds of travel can be soft enough to allow fast, almost unrestricted compliance over small and medium-sized



bumps, yet bottoming-out on the biggies is rare. And rear-end kickup (usually caused when a shock abruptly reaches full compression and then "unloads" too quickly because conventional damping must be a compromise between compliance and control) is practically eliminated, since the rebound damping remains firm until the spring is not so highly compressed.

So through the use of two-stage damping rather than mechanical linkages, ITC achieves the desired rising rate at the rear wheel. Actually, there's no reason why ITC wouldn't work in a single rear shock, but Husqvarna still prefers duals. Compared with an Ohlins unit intended for single-shock applications, for example, the twin Ohlins offer about 100 percent more-efficient cooling area (through greater total body surface and better exposure to cooling air), 23 percent more piston area and 53 percent more-efficient valve area—all without the complication and increased maintenance of a linkage. Until those drawbacks can be overcome, Husqvarna's outlook on single-shocking will remain a lot like 7-Up's on caffeine: Never had it . . . never will. *—Paul Dean*

Will It Win?

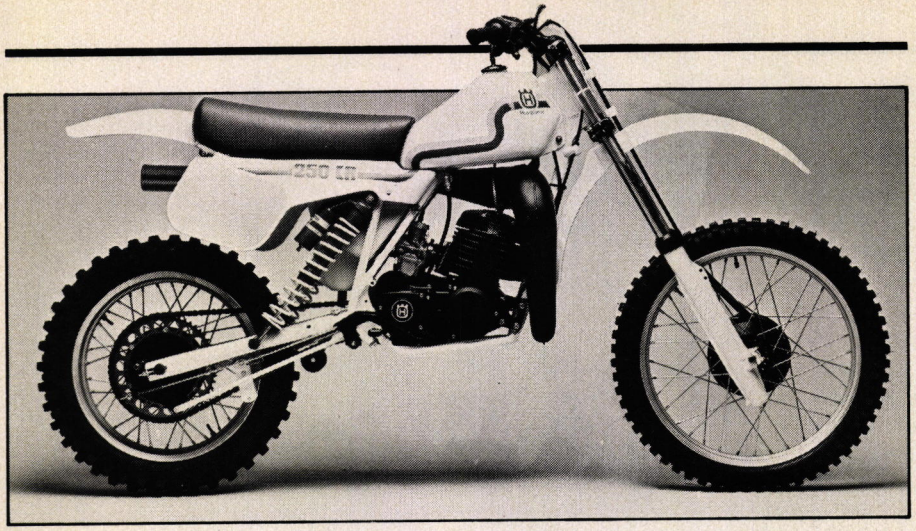
• Despite all of its cosmetic and mechanical differences, the new 250CR still feels and acts just like any typical late-model Husky. Meaning that it is exceptionally slow-steering, extremely stable and has a wonderfully plush suspension.

That's fairly predictable, though, since nothing else is configured quite like a Husqvarna. Take the steering geometry, for instance: It might be quicker by Husqvarna's standards but it is dead-slow by everyone else's, with a degree or two more head angle and about an inch more trail than any other bike in the class. The new CR does steer a tad more quickly than the old one, but it still is sluggish and awkward in low-speed turns, especially the flat, unbermed ones.

Things got better once we swapped the stock Trelleborg front tire for a Metzeler, but the CR still insisted on drifting wide in the slower corners. If there's a berm handy, however, the bike will carve around any kind of turn; and it always goes right where you aim it through any sort of high-speed corner, bermed or not.

What you get in exchange for the CR's

Continued



slow steering is the superb directional stability that Huskys are famous for. Despite its quickened geometry, the 250 still is bound and determined to travel in a straight line over the most vicious bumps and punishing whoops. And when it does get kicked sideways, which happens from time to time, or if it lands from a big jump all crossed-up, the Husky almost always snaps right back into line immediately.

Some of that stability is the result of the 250CR's best overall feature—its suspension. The fork rarely bottoms, and soaks up just about anything the worst track surface can throw at it, even though it seems way too soft when you first sit on the bike. Our only complaint was that during hard braking on steep downhills, the fork compressed far enough to firm up the damping (which, due to the taper of the damper rods, gets stiffer in the last few inches of travel), so every bump was felt through the handlebar. Installing a half-inch-thick preload spacer atop each spring cured those symptoms without adversely affecting the fork's behavior elsewhere.

As good as the fork is, the ITC rear suspension is better. It glides over most tracks so smoothly and effortlessly that you often wonder whether some bumps are real or merely optical illusions. Even when you do feel the rear wheel bash into some monstrous, square-edged pothole, the effects are never harsh. Little bumps and chops also seem to disappear beneath the rear tire. And no matter how high or far you launch the CR from a skyshot jump, it always lands softly, as though you had set down on the world's biggest waterbed. All in all, you have to be extremely aggressive—or extremely *big*—to solidly and consistently bottom the rear end.

Trouble is, you end up being wildly aggressive quite frequently on the CR, because its engine demands that you ride that way. The 244.7cc motor makes a reasonable amount of very tractable horsepower within its narrow powerband, and the ITC rear suspension helps that power hook up with the track quite effectively, but the usable rpm range just isn't very wide. The engine is pretty lifeless when you fall off the bottom edge of the powerband, and although the CR revs fairly high, it doesn't rev as quickly as you might expect with so peaky an engine.

Consequently, the Husky needs to be in precisely the right gear at precisely the right time to maintain a competitive pace. And that's more easily said than done. The gear ratios are a bit too widely spaced to make best use of the powerband, so a normal riding error can drop the revs down off the pipe or put you in an awkward situation where one gear is a little too high and the other a little too low. Clutch-fanning isn't always the answer, either, since that tactic works best with an engine that revs more quickly than the Husky's.

As a result, you can be competitive on the CR only if you do everything to near-perfection. The suspension, the stability and the powerful-but-progressive front brake all try to make your race easier, but the engine and the steering don't. So you must hit your lines, set up for turns, shift, brake and pass with the exactitude of a surgeon, all while attacking the track with every bit of aggressiveness in you. And if you rode that well on most other 250s, you'd be a lot more competitive in the race and a lot less tired at the end of it.

That comparison, in fact, says it all. The 250CR is the first 1983 motocrosser we've tested, so we had only the competition's '82 models as a point of reference. And the Husky was able to run with them, but just marginally. Once all the other better-than-ever '83s hit the track, the odds against winning on a 250CR will skyrocket. And Husky's fading image won't get its needed injection of new blood. ●

Ride Review

• I just don't understand it. I mean, we both know that in order to go *really* fast you need the absolute latest in color-coordinated, high-fashion equipment. So why is it that it's so hard for me to do well on the Husky?

After all, the new CR has to be the trickest-looking thing on wheels. With its white frame and blue seat it looks almost edible. But off the line it never seems able to come up any better than around seventh place. And if there's traction, it has trouble just pulling a second-gear start. Then trying to move up through the pack requires hard work; mid-straightaway passes are only possible when other riders blow a shift, or maybe where the track gets really rough. While the other machines are spending more time trying to hook up with air than with the track, the Husky and its ITC suspension can motor right by. But most of the time the Husky can only hope to pull even with the Japanese 250s, despite its big color advantage.

But the 250CR is so trick-looking the problem just can't be in the motorcycle. Maybe it's my riding gear. That's it; tomorrow I'm going to get some bright orange boot guards. And do you know where I might find some injection-molded white riding pants? *—Ron Lawson*

• Proudly displaying his gaudy black-and-gold creation, a motocross manufacturer once told me with a knowing wink, "Hey, if you don't have anything new, just paint it a different color." Six years ago that approach worked, and black-and-gold racers sold well. I'm not sure a coat of white paint is going to have the same effect on the sale of 1983 250 Husqvarnas.

It wouldn't be too bad if the all-new paint scheme were an improvement, but to me the refrigerator-white frame, tank and fork legs don't look half as nice as the traditional Husky styling. What's more, the gaudy white no longer enhances the high-cost, high-quality image that Husky has established over the years.

You might not agree with my views on styling, but what's under the new paint leaves little room for subjective argument. For all its redesigned details, the 250CR is much the same as it was last year. Sure, the new rear suspension works well and the motor might churn out a few more horses. But those changes alone aren't going to keep the Husky ahead of all that's new and radical from Japan.

Six years ago the white paint might have been enough, but today there are too many bikes that are cheaper, faster and handle just as well as the Husky.

—David Dewhurst

CYCLE GUIDE SPECIFICATIONS

Husqvarna 250CR — motocross

IMPORTER: Husqvarna Motor Corporation, 4935 Mercury Street, San Diego, California 92111

CATEGORY: motocross

SUGGESTED RETAIL PRICE: $2495

ENGINE

Type ..... two-stroke vertical single
Port arrangement ..... one reed-valve-controlled intake, four main transfers, one booster transfer, one exhaust
Bore and stroke ..... 69.5mm x 64.5mm
Displacement 244.7cc
Compression ratio (uncorrected) 12.3:1
Carburetion ..... one 38mm Mikuni slide/needle
Air filter ..... dual-stage washable oiled foam element
Lubrication ..... pre-mixed fuel and oil
Starting system ..... primary kick
Ignition ..... internal-rotor magneto CDI
Charging system ..... none

DRIVETRAIN

Primary drive ..... straight-cut gears; 2.406:1 ratio
Clutch ..... wet, multi-plate
Final drive ..... #520 chain (5/8-in. pitch, 1/4-in. width); 4.417:1 (53/12) ratio

Gear	Internal gear ratio	Overall gear ratio	MPH per 1000 RPM
I	2.067	21.964	3.44
II	1.556	16.532	4.57
III	1.238	13.158	5.74
IV	1.043	11.090	6.81
V	0.880	9.352	8.08
VI	0.778	8.266	9.14

SUSPENSION/WHEEL TRAVEL

Front ..... Husqvarna air-spring, 40mm stanchion tube diameter/11.8 in. (300mm)
Rear ..... dual Ohlins shocks, 10-way adjustable spring preload/12.7 in. (322mm)

BRAKES

Front ..... drum, double-leading shoe
Rear ..... drum, single-leading shoe, rod-operated

TIRES

Front ..... 3.00-21 Trelleborg Deep Grip T544 Motocross
Rear ..... 4.25-18 Pirelli MT32 Sandcross

DIMENSIONS AND CAPACITIES

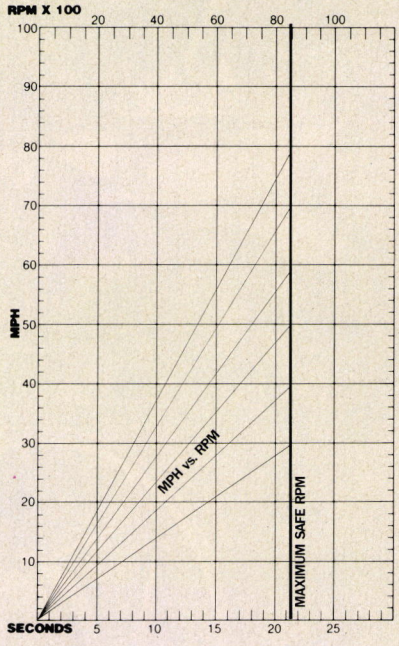
Weight ..... 227 lbs. (102.9kg)
Weight distribution ..... 47.4% front, 52.6% rear
Wheelbase ..... 57.8 to 58.5 in. (1468 to 1487mm)
Seat height ..... 38.2 in. (970mm)
Handlebar width ..... 32.7 in. (857mm)
Footpeg height ..... 17.2 in. (437mm)
Ground clearance ..... 13.4 in. (340mm), at engine cradle
Steering head angle ..... 30.0 degrees from vertical
Front wheel trail ..... 5.51 in. (140mm)
Frame ..... tubular chromoly steel, single front downtube
Fuel tank ..... aluminum, 2.8 gal. (10.5l), no reserve
Instrumentation ..... none

PERFORMANCE

Top speed (observed) ..... 77 mph (124 km/h)

WARRANTY: 30 days, engine and frame only

AVAILABLE COLOR: white only



COMPARATIVE TEST DATA:

Make & Model	Wheel Travel Front/Rear, in.	Weight (fuel tank empty), lb.	Weight bias Front/Rear, percent	Steering head angle/Trail, degree/inches	Transmission, number of speeds
Husqvarna 250CR–'83	11.8/12.7	227	47.4/52.6	30.0/5.5	6
Honda CR250R–'82	11.4/12.0	228	47.9/52.1	27.5/4.3	5
Kawasaki KX250–'82	11.2/11.3	220	47.0/53.0	30.0/5.1	5
Suzuki RM250–'82	10.6/12.3	217	47.5/52.5	29.3/4.8	5
Yamaha YZ250–'82	11.0/11.0	235	48.5/51.5	27.5/4.7	5

A BEAUTIFUL DEFIN

Torque by itself isn't very exciting. It's just a way of measuring how much force an engine exerts on its crankshaft.

It's what torque does for a motorcycle that's the exciting part. A motorcycle, for instance, like the CX650 Custom.

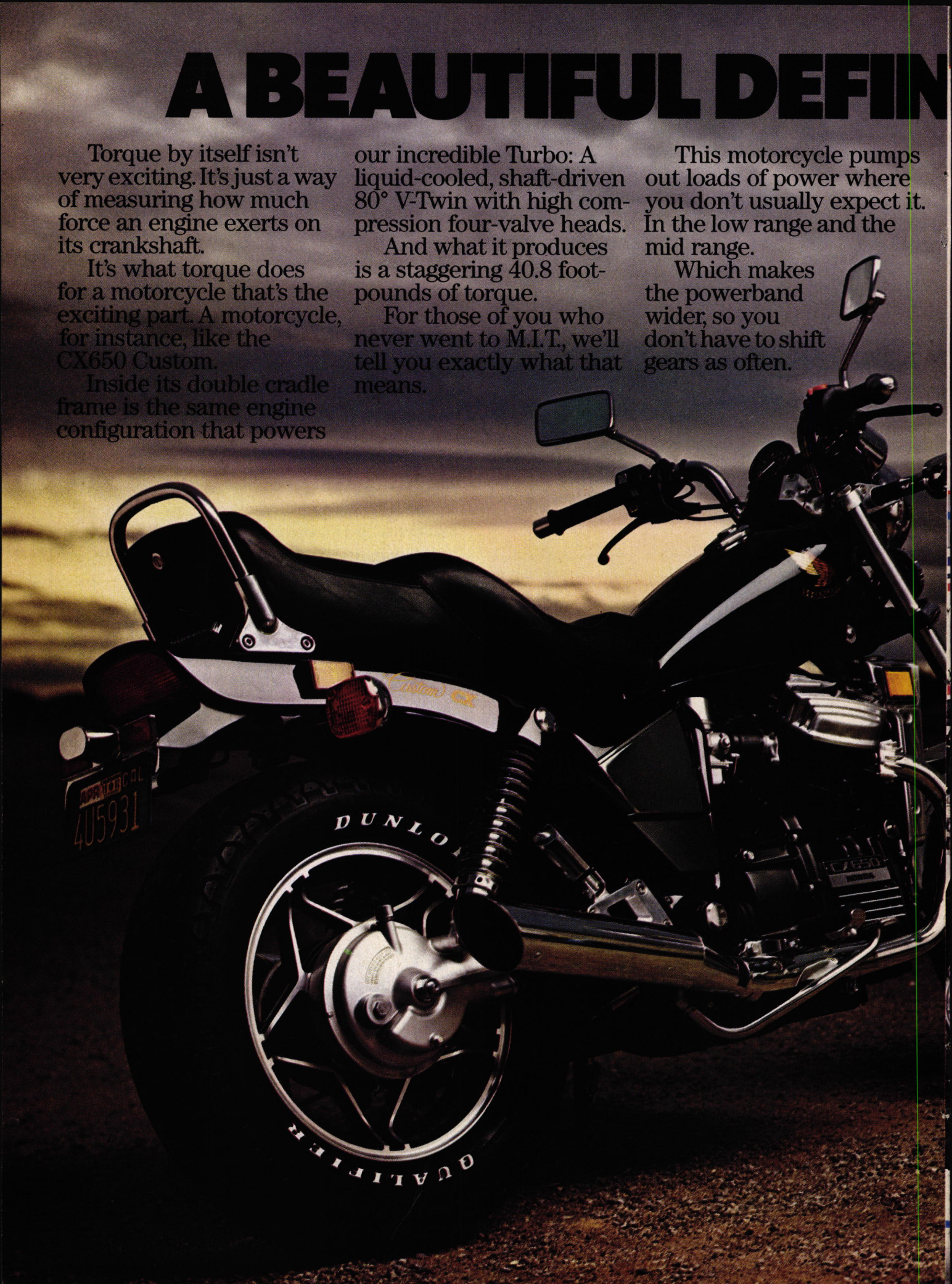
Inside its double cradle frame is the same engine configuration that powers our incredible Turbo: A liquid-cooled, shaft-driven 80° V-Twin with high compression four-valve heads.

And what it produces is a staggering 40.8 foot-pounds of torque.

For those of you who never went to M.I.T., we'll tell you exactly what that means.

This motorcycle pumps out loads of power where you don't usually expect it. In the low range and the mid range.

Which makes the powerband wider, so you don't have to shift gears as often.



ITION OF TORQUE.
It can cruise at lower rpm's so it's smoother and more economical. And when there's something to pass, its incredible torque lets you pass it effortlessly. Without downshifting.
If this sounds like your kind of engine, wait'll you see what kind of motorcycle it comes with. With its rakish front forks, low slung seat and sculptured rear fender, the CX650 Custom gives you a totally new way to look at a 650.
Which is only natural. Because all that torque is going to give you a totally new way to ride one.
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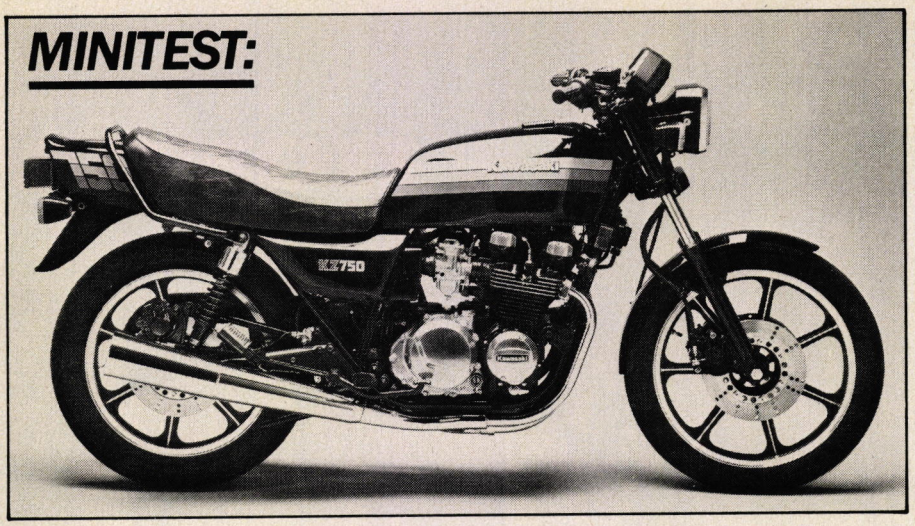

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Kawasaki KZ750-L3

GT performance in basic black.

• Kawasaki might appear to be one motorcycle short in its 1983 lineup; its E-model 750, the plain, sport-version KZ that, since 1980, has won so many accolades for its brute power and nimble handling, is gone. But Kawasaki prides itself on performance and wasn't about to be left out of the standard-750cc GT-bike market. So there is a replacement for the 750E, and it's anything but standard.

You see, this year's base-model three-quarter-liter bike, the one aimed at the multi-faceted GT slot, is the 750-L3, the new designation for what actually is last year's GPz750. There are some minor differences between the two, like the instruments, handlebar, lack of a quarter-fairing and absence of a balance tube for the air-assist fork; but where it matters, the new L3 *is* 1982's GPz. It's a hard-nuts motorcycle and, as if to underscore that, it comes in only one color—black.

The KZ750 always has been a strong performer; this year it's even more so. The engine, carburetors and exhaust system are a straight lift from the '82 GPz. It's the same DOHC, eight-valve, 739cc four, with 9.5:1 compression, aggressively ground cams and smooth-flowing 34mm Mikuni CV carburetors. And like the GPz, the engine is rubber-mounted, effectively damping almost all vibrations. There are no annoying buzzes or tingles that creep through at any speed—either parking-lot or full-wick. That absence of vibration, so necessary in a GT bike, combines with a powerband that begins when you push the starter button and ends at redline.

The L3's engine is sport-tuned, with GPz heritage, make no mistake about that, but there's nothing high-strung or cammy about it, either. It's perfectly content burbling along with urban traffic, sport-touring at a brisk pace or snapping off 12-second quarter-mile times all day long. It enables the machine to nicely fill more than one niche, without compromising any of its roles.

And the L3's—or GPz's, if you prefer—chassis is just as versatile as its engine. With the minimum recommended air pressure in the fork (8.5-13 psi range) and the rear shocks set toward the lower end of their seven preload and five damping positions, the ride is almost stately. But true to the bike's multi-role purpose, when the fork pressure is pumped up and the shocks wound a bit tighter with added damping dialed-in, the L3 is more than ready to do battle with the twistiest sections of canyon roads. Ground clearance is excellent on both sides of the machine, allowing full use of the tire's tread before any hardware touches down. You can bend *way* into a turn, tracking smoothly without a hint of any bobble or weave. Where you aim is where you go—effortlessly. The L3 responds well to a light touch, although in no way could it be called twitchy.

And the ergonomics, too, are perfectly suited to GT use—in the European manner. The pegs are rearset and the handlebar is a one-piece, tubular unit, very similar to the Eddie Lawson Replica KZ1000R's. The resulting riding position is, if anything, better than a GPz's; the bar is wider and just a hint taller for a more comfortable all-around feel. And with a tank capacity of 5.7 gallons there's ample time to enjoy it; you can travel well past the 200-mile mark before having to switch to reserve.

So the KZ750E might be gone, but it won't be missed. Not with something like the L3 to take its place. —*Joe Kress*

© 1983 PATRICK BEHAR

If the look is familiar but you can't place it, think red with a quarter-fairing

This year's standard KZ is 82's GPz, from its bodywork right down to its tires.

KAWASAKI KZ750-L3 Sports

Importer: Kawasaki Motors Corp.
2009 East Edinger Avenue
Santa Ana, California 92711

Category	street
Suggested retail price	$3099
Engine type	four-stroke transverse vertical four
Valve arrangement	double overhead camshafts
Bore and stroke	66.0mm x 54.0mm
Displacement	739.0cc
Compression ratio	9.5:1
Carburetion	four 34mm Mikuni constant-vacuum
Gearbox	5-speed
Front fork/wheel travel	Kayaba air-spring, 36mm stanchion tube diameter/5.8 in. (146mm)
Rear shocks/wheel travel	dual Kayaba shocks, 7-way adjustable spring preload, 5-way adjustable rebound damping/ 4.9 in. (124mm)
Wheelbase	57.0 to 58.4 in. (1447 to 1484mm)
Seat height	31.4 in. (798mm)
Weight	487 lbs. (220.9kg)
Best 1/4-mile acceleration	12.095 sec., 108.95 mph (175 km/h)
Top speed (calculated)	134 mph (216 km/h)
Stopping distance from 60 mph	132 ft. (40.2m)
Fuel consumption	47 to 53 mpg (20 to 23 km/l)
Warranty	6 months unlimited mileage
Available color	black only

SPORT LINES

Cycle Guide's True Tales of Race Courses, Dark Horses and Machines at Speed

EDITED BY DAIN GINGERELLI

Fish, Fowl or Motorcycle?

ATV racing is family fun—for now.

PHOTOGRAPHY © 1983 JERRY SMITH

• When Honda introduced the all-terrain cycle in 1970, the ATC90 didn't exactly knock the motorcycle world on its ear. "Cute," was an oft-used term to describe it. Nonetheless, Honda's marketing people expressed satisfaction with it, and Honda's design engineers came up with new ideas for it. Now, a dozen years later, ATC sales comprise a sizable share of Honda's total sales. Understandably, Yamaha, Kawasaki—and now Suzuki—have jumped on the bandwagon with tripodal cycles of their own.

Naturally, three-wheeler enthusiasts eventually began racing one another with their miniaturized farm implements and, until now, it's been grass-roots-level racing. But one organization, Coyote Racing, promoted a nationwide network of ATV races for 1982 which culminated in the San Jose Odyssey/Three-Wheeler Championships. Winners from 13 regional qualifiers were invited to race for a $20,000 purse. And with Team Honda leading the pack, the racing community finally began to take notice of these balloon-tire racers sliding and jumping around the TT and motocross tracks of America.

Honda's involvement hasn't been without criticism. At San Jose, cries of foul play rose from the privateer ranks. They consider a factory-backed team as overkill in such a new form of racing. One privateer lamented: "If Honda is going to spend the money, why don't they give it to the little guy and help him? They're the ones who really need it. Honda is going to sell all its ATCs anyway; why not give something back to the people who are actually supporting it? It bugs me that we're competing against factory riders on bikes that no one else has."

"Baloney," retorts Wess McCoy, Honda's ATC racing director. He claims that Honda pays only for its riders' parts, and supplies

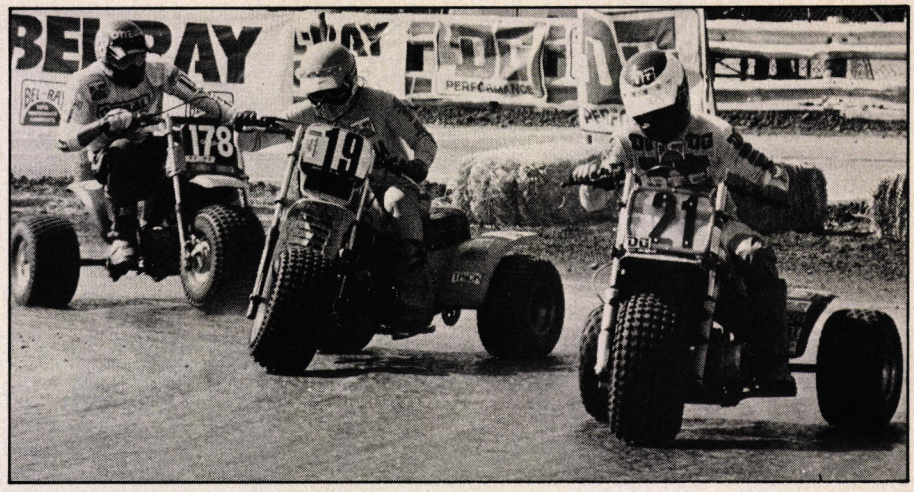
Continued

them with *stock-based* trikes. McCoy also says there is no direct help from Japan with the ATC racing program. "We turn production machines into racers right here in the U.S.," he says. "And we work with aftermarket companies to develop parts that end up where any privateer can buy them."

Moreover, Honda's involvement in ATV racing has helped to legitimize the sport. For instance, McCoy says Honda pumped more than $200,000 into SCORE off-road racing in 1982, mainly to convince officials that three-wheelers can indeed compete in those grueling desert events. "They finally accepted us," says McCoy. "Now we have ATV racing in the desert. But we were the only three-wheel guys out there at first."

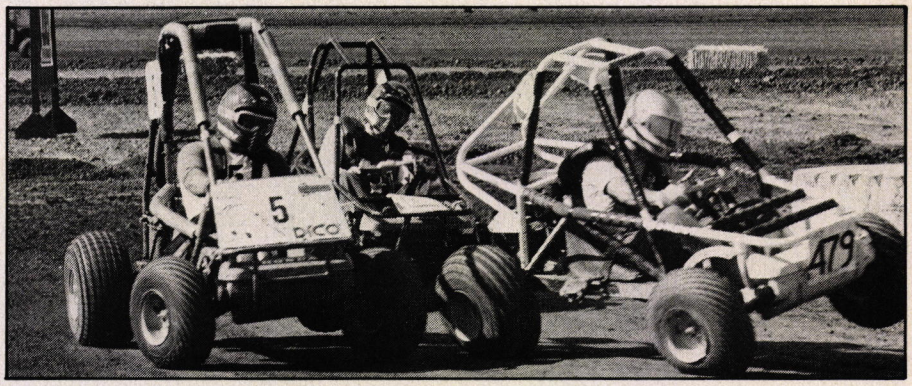
But despite the number of Team Honda entries at San Jose, the Big H only won two of the four ATV main events: Team rider Curtis Sparks copped the 200cc class, while in the Open class, Mike Coe flew the Honda colors. Loosening Team Honda's grip on the gold was Steve Wright's 125cc-class win—he did it on a Yamaha. The big upset was Jim White winning the 250cc class with his non-factory-sponsored Honda, a machine sporting a CR engine modified by exhaust-system specialist Darryl Bassani.

With legitimacy comes complications, though. Some ATV-backers fear the worst, and worry that their racing will become too popularized—and too organized. "Right now it's a family thing, something you can do with your wife and kids," said one trike-racer. "But soon," he added, "it'll be like the AMA and bike racing. And then it might not be fun anymore." *—Jerry Smith*



Three-wheel sliding at San Jose championships

Tripodal stance teaches two-wheelers new laws of physics.

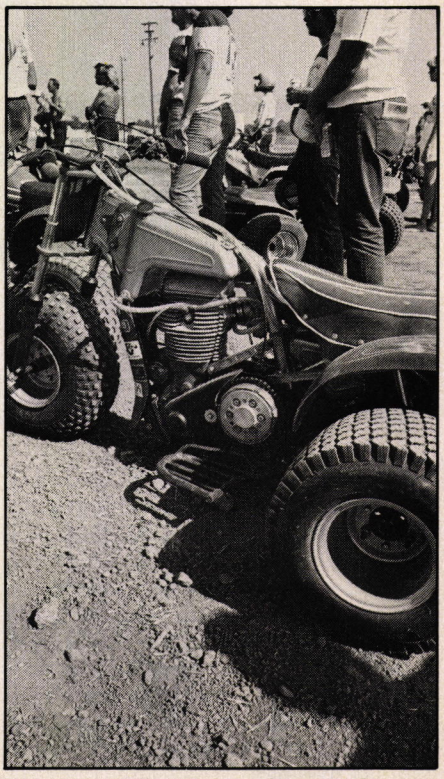


A pack of Odysseys bump and nudge each other through a turn

Getting up on two wheels again.

ATC rider who's lost his mount in the heat of battle

No way to win a race—on any kind of machine.



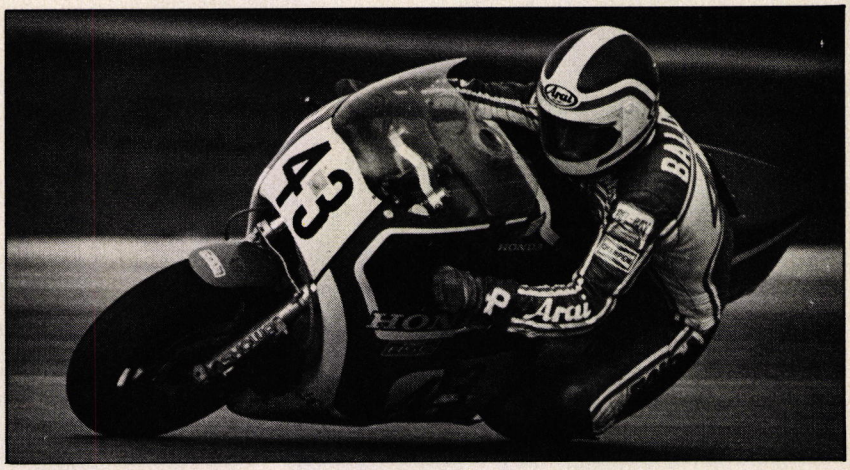
Open-class ATV with speedway engine

Not all trikes are Hondas.

Pit Bits

• Rolling for dollars: Mike Baldwin won more than just the 1982 United States Road Racing Championship. He also carted away $7,000 from the AMA, the most ever for that series. In addition, the F1 champ won $2,000 for finishing 13th overall in the Winston Pro Series. WPS champ Ricky Graham won $35,000 for his efforts, while second-place Jay Springsteen added $20,000 of Winston's money to his piggy bank.

• Courtin' and sparkin': The American Motorcyclists Association filed a $15,000,000 lawsuit against Honda, Yamaha and Suzuki, following disputes over the Trans-USA series and the institution of this year's Grand National motocross series. The suit, filed by the Board of Directors on behalf of the AMA in the U.S. District Court, Central District of California, was in response to the three Japanese companies withdrawing entries from the 1982 Trans-USA. The action, says an AMA spokesman, is based on restraint of trade, conspiring unlawfully to monopolize, conspiracy to breach obligatory duties to AMA's MX program, and conspiracy to interfere with contractual and advantageous business relationships. See you in court.



© 1983 RICH CHENET

New F1 champ Mike Baldwin rode smoothly throughout the season

Refuting the doubters and collecting the dollars.

• The world still turns: Meanwhile, Honda, Yamaha and Suzuki maintained factory-supported teams in the Trans-Cal series. The Continental Motorsports Club—a California-based organization—sanctioned the Trans-Cal, supporting three classes: 125cc, 250cc and 500cc.

• CHiPs ahoy: Bruce Penhall made a brief return to speedway following his sudden retirement. This time, though, Penhall participated as a mentor rather than a rider, helping former British League team-

Continued

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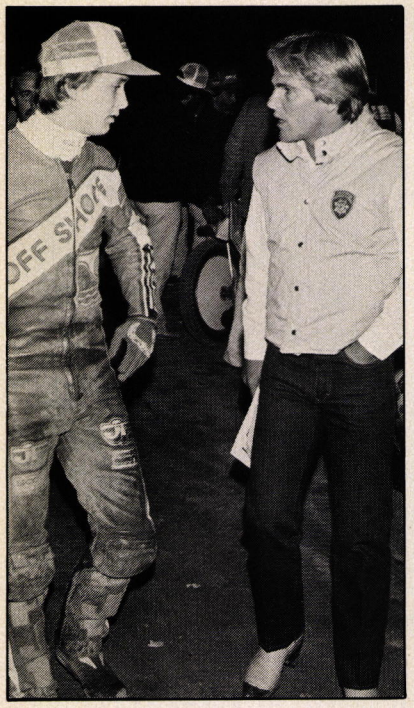

Penhall counsels King in pits

Royal meeting of two kings.

mate Lance King win the California Speedway Championship. King had both of Penhall's four-valve Weslakes to ride at the Inland Speedway, and scored in a decisive run-off race against John Cook to win the title.

• Motor Moran: Many predict that Shawn Moran will inherit Penhall's position as America's top speedway star. Moran took his first step in that direction, too, by winning the United States national title at the Orange County Fairgrounds. Mike Faria and Dub Farrell were second and third.

• Salt water: For the second time in the event's history, the Bonneville nationals were rained out. There was as much as a foot of water on some parts of the salt flats, and so the event was cancelled. There's always next year.

• Posted limit: You might think that Bonneville Speedway is the fastest racetrack in the world, but it also has a posted speed limit: The return lane has a maximum speed that *all* cars and bikes must abide by. And, you guessed it; it's the double nickel.

• Elmer, close the door: Two-time Daytona 200 winner Dale Singleton has switched to cars. Singleton will try his hand at NASCAR racing, driving for Glover Racing Enterprises. His main concern now is Elmer—the pig—getting car sick.

• Quote Department: When Kenny Roberts was asked recently if he'd ever switch to car racing, he replied, "I tried 'em, they're no fun. You can't drag a knee."

—Dain Gingerelli

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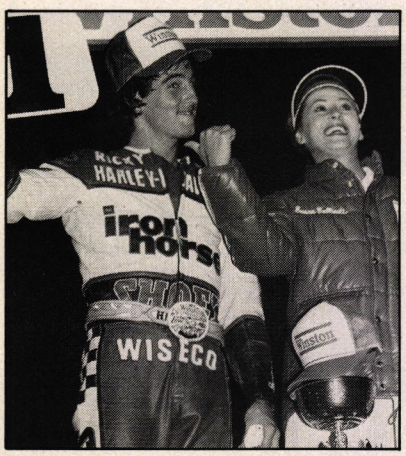

Ricky Graham after the ball

This time the clock struck one.

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Honda NS750 and Harley XR750

Two worlds around the same track.

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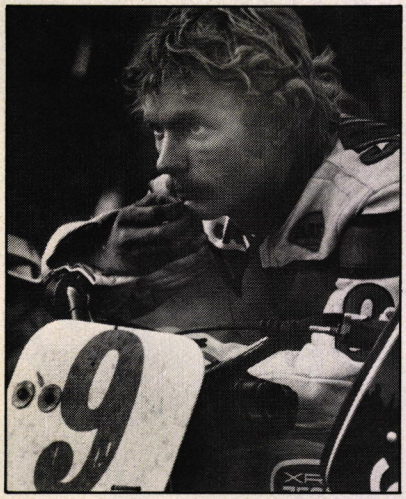
Fast Freddie in victory circle at Spa

A hint of things to come.



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Three-time champ Jay Springsteen

Second in 1982.

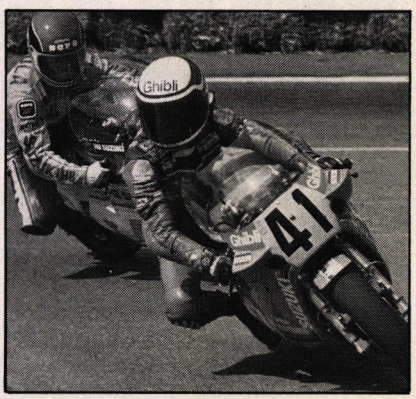
FLATTRACKING

• *How much a plate?* Despite enlisting the services of Scott Parker, and financial aid from Pabst Blue Ribbon Beer (the *beer* that made Milwaukee famous), Harley-Davidson wasn't able to haul The Plate back to Milwaukee. Instead, a quiet, likable young privateer from Seaside, California won it. Congratulations, Ricky Graham.

• *The leader, at last.* Scott Pearson answered the question flattrack railbirds asked: Could a water-pumping Honda win an AMA flattrack event? Pearson and his NS750 did just that at the Louisville Half-mile.

• *Great Scott.* Pearson's Loudon roadrace appearance might be a forecast of things to come. With Honda's successful roadrace program, and the progression of the NS750, look for Pearson to compete in all five types of GN races this year. Not since Kenny Roberts fled to Europe in 1978 has there been such a well-rounded Grand National racer.

• *One short.* Jay Springsteen's Houston shorttrack win aboard a nine-year-old Harley put him at the top of the all-time win list. He still needs one more championship to equal the feat of Carroll Resweber, though.



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Uncini leads Randy Mamola

Winning the title fair and square.

ROADRACING

• *Square one.* Franco Uncini stuck to Roberto Gallina's game plan and won the 500cc world championship. Meanwhile, Suzuki stuck with its RG500-based Gamma Mk. II, proving that square one is the best place to start for winning the manufacturer's cup. Honda and Yamaha veered off into vee territory—and lost.

• *Faster Freddie.* Fast Freddie Spencer lived up to his name and won two GPs in his rookie season.

• *Fast-food flyers.* Now that the new Superbike rules call for 750cc engines, there should be some very fast 1024cc café racers buzzing the streets.

• *Call him Mr. Slick.* The WPS establishment is all the wiser, thanks to Steve Wise and his Houston TT theatrics. But while Mr. Superbiker made a lasting impression at Houston, he earned most of his Winston Pro Series points roadracing and became the AMA Grand National Rookie-of-the-Year.

• *Imbalance of trade.* Some say too much American roadracing talent is being exported to Europe. And the list continues to swell, as rumors persist that Eddie Lawson and Mike Baldwin will join the Expeditionary Forces. The stateside roster includes: Steve Wise, Wayne Rainey, Harry Klinzmann, Thad Wolff, Nick Richichi, Jim Filice and Miles Baldwin.

• *Includes view of lake and running water.* The FIM slowly is catching up with the rest of the world—and the 20th century. The 350cc class finally was dropped, and 50cc tiddlers will be 80cc for 1984. The Geneva-based FIM offices should be wired for electricity by 1990, too.

MOTOCROSS

• *Honda here and abroad.* Just to show that 1981 was no fluke, American Honda sent eight CRs and four riders to contest the Trophee and Motocross des Nations. They won again.

• *The class of '81.* And the 1981 Trophee and Motocross alumni went on to do the following: Danny LaPorte won the 250cc

Continued

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Danny Chandler being perfect in his heat wins at des Nations races

Who was that masked man, anyway?

World Championship, Donnie Hansen gathered the gold in the AMA 250cc National and Stadiumcross Series, while Johnny O'Mara and Chuck Sun placed favorably in the 125 and 500 Nationals. O'Mara and Hansen swept the Swiss and Swedish GPs, as well.

• *Green with envy.* While Kawasaki chose to recognize the Trans-USA, it didn't sanction an official team for it. Nor did Team Green win a single championsip all season.

• *Hollis who?* Congratulations, Dave Hollis, for winning the prematurely terminated Trans-USA Series. Hollis rode a privately entered Suzuki.

• *Old is new.* Our new MX heroes are Brad Lackey (age 28) and Danny LaPorte (25).

• *Getting into the sport.* There's more to Los Angeles than surfing and singles bars. The combined attendance for the two 1982 Supercross events in SoCal was more than 135,000.

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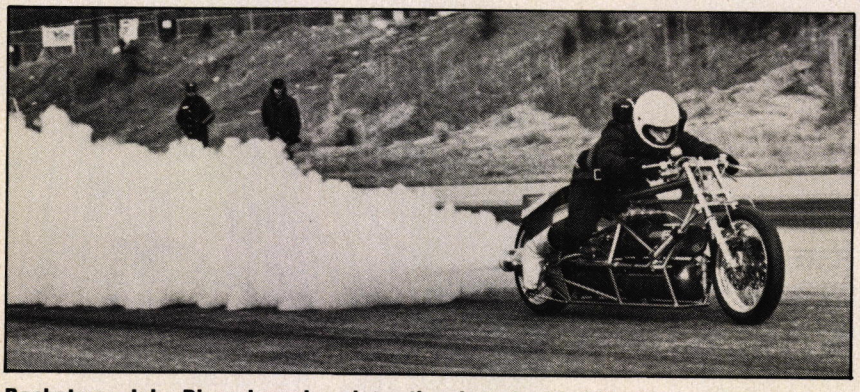
Lackey (6) chases teammate Vromans

In the end the old man was first.



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Rocketman John Dixon launches down the chute for his 206 mile-per-hour run

Not retroactive into the record books, however.

DRAGRACING

• *Dauntless Dixon.* Dragracing's new high-speed honcho is John Dixon. Using a rocket-powered bike, Dixon was the first man to break the 200-mph barrier, surpassing Russ Collins' unofficial mark of 199.5. Collins was one-upped again when Rocketman's bike went out of control during an attempted 250-mph pass, in which Dixon crashed through the lights at about 225 mph. Collins' 175 mph get-off was the previous high.

• *King of the Hop.* Dixon can asterisk himself into the books with this feat: He parachuted to safety during his 225-mph spill, giving new meaning to the term "down the chute."

• *He wears a Big S.* Terry Vance, while topping 200 mph in a practice run, won even more glory by grabbing both the NMRA Top Fuel *and* Pro Stock titles. No one had ever done that before. Fittingly, he was named NMRA Rider of the Year, while the other half of Vance/Hines Racing, Byron Hines, again has the Tuner of the Year plaque on his wall.

Wheelie King on his Honda XR250R

Big sprocket for the Big Wheel.

ODDITIES

• *From green to red to be in the black.* Wheelie King Doug Domokos switched from Kawasaki to Honda, evidently because the guys in red offered him more green. It wasn't paint, either.

• *86ed in '82.* Chevron Land Development Corporation finally laid Ontario Motor Speedway to rest. It took years to do it, but the Big O finally became a big zero.

• *Hollywood, here I come!* Bruce Penhall became the first two-time American world speedway champion, and the first-ever defending champ to retire. He's directing his energies toward Hollywood now.

• *It's what's happening.* The show of force by all four factory teams at Laguna Seca last July confirmed our jingoistic drum-beating that LS is the greatest show on American blacktop. *—Dain Gingerelli* ●

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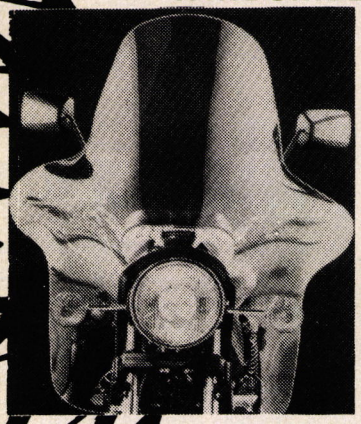

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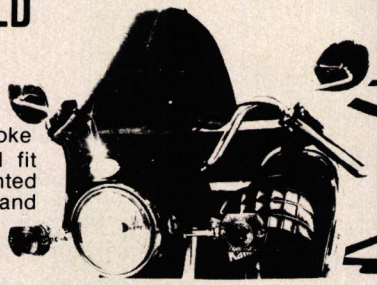

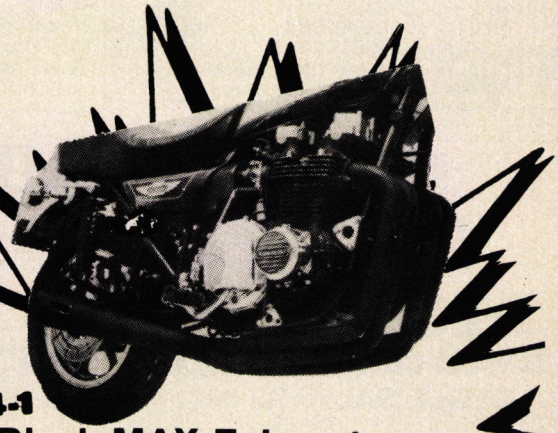

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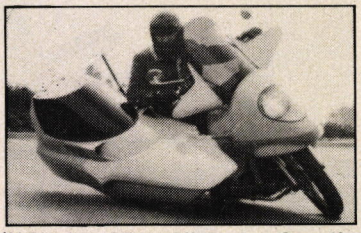

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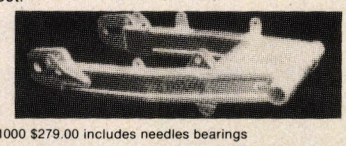

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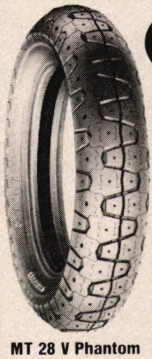

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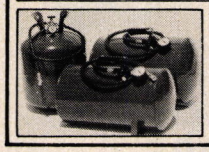

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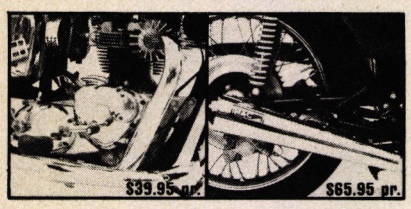

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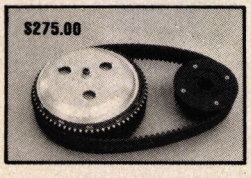

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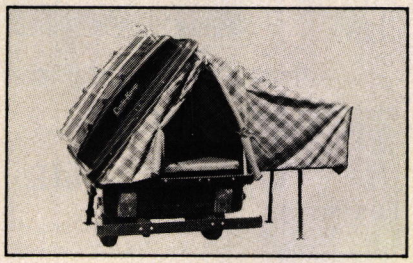

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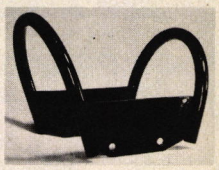

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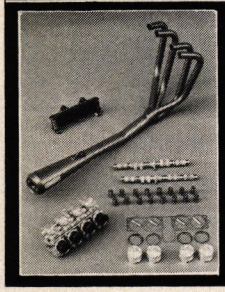

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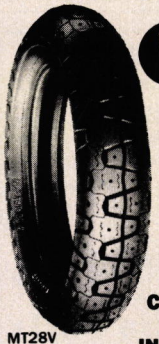

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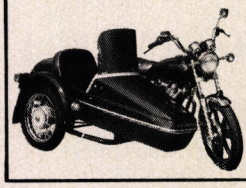

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LETTERS

Watching over the kids, Painted-on personalities and Are you man enough?

TIME TRAVELERS

I have to thank you for that story in the October issue, TT Time Machines. It was a unique and pleasant change. I would also like to thank Ed Arnold and Paul Adams for keeping the blood pumping in those old racehorses. But how they found the courage to hand those machines over to you guys is a mystery to me. I only hope their children were returned unharmed on April 11, 1982.

Randy Norman
Klamath Falls, Oregon

DON'T INVOLVE US

I have a 1965 BSA, and as I'm interested in selling it, I would like to know its value. Is there anyone in the Orlando, Florida area that I could contact for an appraisal?

Mrs. S. Robinson
Longwood, Florida

Does Mr. Robinson know about this letter?—ed.

AND AREN'T WE CUTE

I have been riding for 14 years and I have never experienced the paranoia Ted West describes (Full-Face Paranoia, October '82). However, his column has given me pause for thought.

Those full-face buckets we wear rob us of one very important asset—humanity. Lord knows, the road gods have given us a stacked deck when it comes to dealing with the four-wheelers, yet we seem to have hurt our chances even further by looking like Cylons from Battlestar Galactica; faceless, unemotional blobs without a soul. Why should a car driver worry about hitting us? We're just 'droids.

Allow me a small digression to help make my point. Until the TT Time Machine article I had no idea what Ron Lawson or Larry Works looked like. To me, and to everyone else on the road, they were just faceless bodies on bikes.

Now, I'm not advocating riding without a helmet; I wouldn't be caught without one. So what was my solution? I painted a face on my helmet. It's not a very good one, but it just might help folks realize that there is a thinking, feeling human riding along with them.

Claus Christiansen
Las Vegas, Nevada

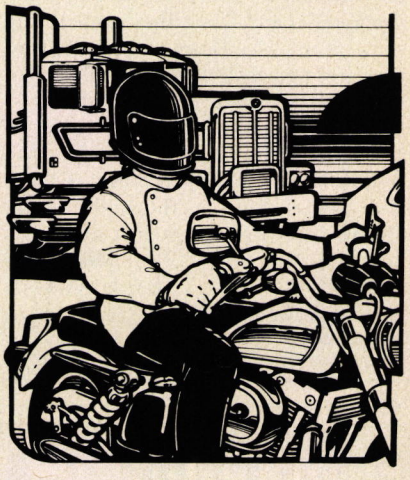
And the possibilities are endless—ed.

¿QUÉ ES MAS MACHO?

It's always amusing listening to reactions from riders who generally don't ride Harleys right after they spend some time on one. Regarding the Ride/Report on the XLX-61, Works' closing comment that this is "a hell of a good motorcycle" was hilarious. Trying to affect that Harley sneer, eh Works? Japanese bikes might be "terrific," but only Harley can build one that inspires profanity. Harleys. Yeah, damn, you bet. No one here but us tough guys. Grrr. . . .

Gary Cohn
Brooklyn, New York

Are you saying that it's good or bad when a bike makes you swear?—ed.



BUT ARE YOU TOUGH ENOUGH?

A couple of weeks ago I wandered into a local Harley dealership in search of the XLX-61 I'd seen in the September Guide Lines. It looked interesting in the picture, but the picture—nice as it was—didn't come close to the Real Steel. The XLX has to be one of the most malevolent-looking motorcycles ever turned loose on the public. That bad boy talked to me, right there in the showroom. "Buy me," it said. I plan to do just that.

By the way, the new Roadster looked familiar when I first saw it. Thinking I'd seen that bike before, I rummaged through my back issues of CG and, sure enough, there it was: Highway 61. The details are a bit different but the concept is still there, right down to the two-tone paint. Do you think maybe Harley-Davidson execs read your Letters column?

Steve Wassenich
Dayton, Ohio

You bet they do . . . closely—ed.

THEY HAD THE MODEL

After looking at the pictures and reading about the new Harley XLX-61 I got to thinking about your "Highway 61" project bike. Whatever happened to that

Continued

LETTERS

machine? Is it still in existence, and if so, who owns it? The XLX is nice, but Highway 61 is still the H-D for me. Which brings up the most important question: Is it for sale?

Bob Jackson
Duluth, Minnesota

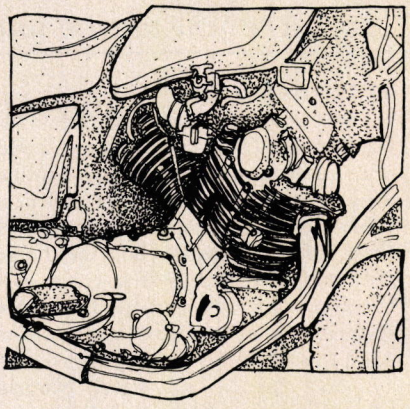
Highway 61 belonged to Harley all along. When the project was completed they got the bike back, changes and all—ed.

WIDE-EYED DISBELIEF

A BMW with liquid-cooling? Production of the 1000 to cease? An inline four, yet? Is *nothing* sacred? God help us all, what do they plan to do next, assemble them in Japan? Don't they realize that some people like Beemers just the way they are? And always have been. Come on, fellas, tell me this is just a bad dream or someone's idea of a joke. Don't do this to me and to all the other flat-twin fans. We respect BMWs and the 60 years of tradition behind them. In the words of Art Buchwald, "Please say it ain't so, Billy."

Mike Cagle
Jasper, Alabama

Steady, Cagle. Remember, so far it's only a rumor—ed.



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AND NOW IT'S YOURS

I was so hopeful last year when I heard about Honda's V45s. Perfect, I thought. A narrow, low-*cg* sporting machine and liquid-cooling was all right as long as it didn't add too much weight. TRAC and Pro-Link also were fine; I figured they had the engineering down and my only worry was what they would do with the styling. So what did we get when the Magna and Sabre were released? Two shaft-drive tourers in drag, and with their video-arcade-jukebox-dashboards awinking, they were machines aimed at pre-pubescent Pac-Man addicts.

Well, '82 has come and gone and I'm still hopeful. I've seen pictures of the VT250F and have read that it handles better than a Ducati 900SS. Here's my vote for a chain-drive V45 with a frame and styling treatment similar to the VT250F. I'm ready.

Michael Dash
New York, New York

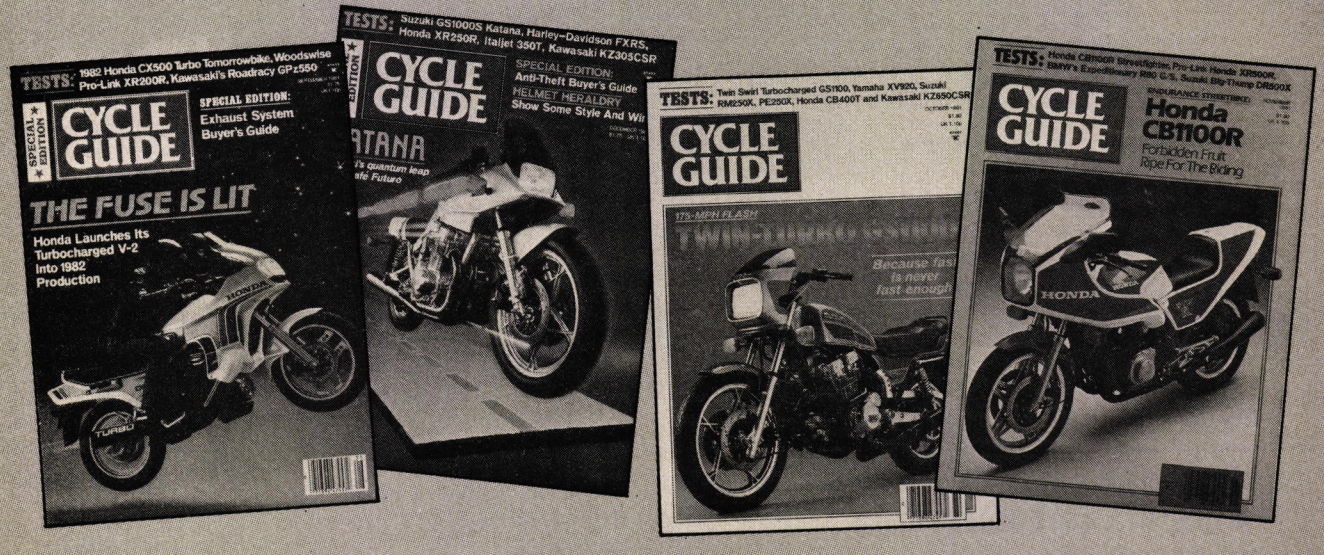
And Honda hopes your checkbook is just as ready. This year they call your bike the Interceptor—ed.

OUR BACK PAGES

Sometimes the Letters column is the most entertaining part of CYCLE GUIDE. Take the November issue, for example: A.E. Burrell's letter condemning your August test of the Harley FLH Classic was an outstanding example of 50s-style American redneck-think. I haven't read anything so funny since the responses to your Highway 61 project a few years back. Obviously, Burrell shouldn't have tried to write until he'd recovered from his lobotomy.

I thought you went to great lengths to

FOUR GOOD REASONS WHY YOU CAN'T AFFORD TO MISS ONE EXCITING ISSUE OF CYCLE GUIDE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LETTERS

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say nice things about the FLH even though it's more expensive than, and functionally inferior to, many of its competitors. I don't necessarily think it's a *bad* bike, but I do believe there's a lot to criticize about the old dinosaur. If that makes me one of "your kind" in Burrell's book, that's just the way it goes. I'm sure I won't lose any sleep over it.

B.A. Reid
Baltimore, Maryland

THE BIG BANG THEORY

What are the chances of ever seeing one of my dreambikes come true? Namely, a Suzuki GN500 single with kick starting, a Yamaha SR550 single, also with kick starting, or a Harley 500 single with, you guessed it, kick starting. As you can see, I have a slight case of thumper madness.

Richard Burris
Wichita, Kansas

And it would seem a slight aversion to electricity, as well—ed.

WORKBENCH REAGANOMICS

I know it's been said that the engineers ride bikes in order to make them more competent. But do they service them, too? On my Seca 550 I've changed the oil and filter seven times and am now on oil filter bolt number three. You see, the bolt is microscopic and my 12mm socket just buggers it up completely. And those bolts keep going up in price; the first one set me back $4.73 and the second went for $10.97.

And it doesn't stop there. To adjust the valves I almost had to take out a bank loan, with shims costing $3.50 each and the gasket priced at $17.00. When maintenance is needed, about the only thing a rider can do to cut the bite a little is be sure to buy parts at a dealership that prices parts right off the manufacturer's printed catalog, not from a computer print-out that could be artificially high.

P.J. Susi
Paterson, New Jersey

You're right, where you buy parts is important. And so are the right tools. Like that new six-point socket you now own—ed.

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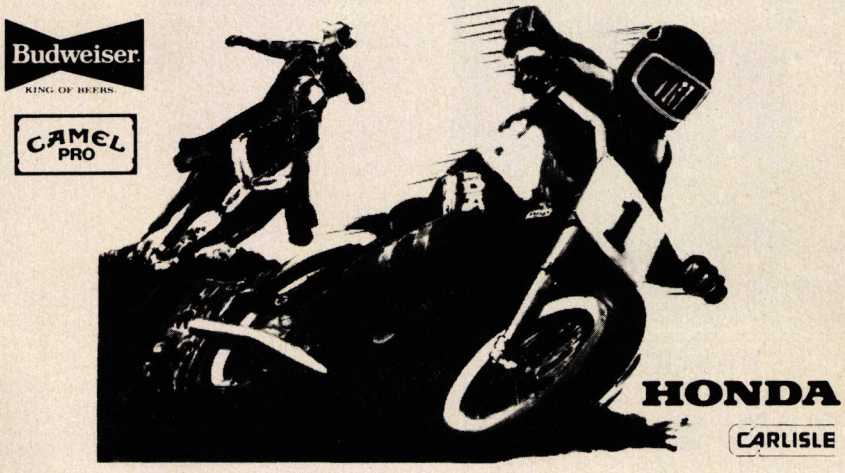

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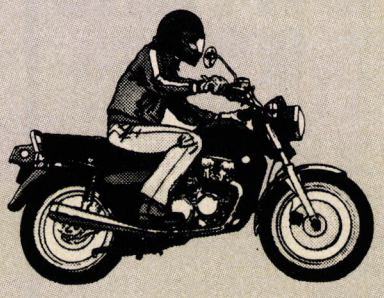

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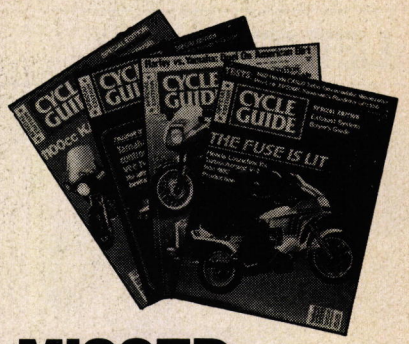

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